

# **Washington State Economic Climate Study**



**Office of the Forecast Council  
September 2002  
Volume VII**

# Washington State Economic Climate Study

Prepared by the  
Office of the Forecast Council

September 2002  
Volume VII

**Washington State**  
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## **Editor's Note**

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The 1996 Legislature passed Substitute House Bill 2758 creating the Economic Climate Council (ECC). The ECC is responsible for selecting a series of benchmarks that characterize the competitive environment of the state. The benchmarks are indicators of the quality of life, education and skills of the work force, infrastructure, and the costs of doing business.

To ensure public participation, the ECC established an advisory committee of six members to assist in the selection of the benchmarks. The advisory committee, along with staff of the House of Representatives, Senate, Office of Financial Management and other state agencies, including the staff of the Office of the Forecast Council, assisted in the preparation of the first report. The Economic and Revenue Forecast Council continues to function as the ECC. Each year the Office of the Forecast Council updates and publishes the Climate Study. This is the seventh annual Economic Climate Study.

**Cover:** *Green Darner Dragonfly, Washington's State Insect*

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# Executive Summary

This report updates the State of Washington's Economic Climate Study, last published September 2001. The study provides information about Washington's competitive standing in relation to the other U.S. states. It is based on the premise that, while improving productivity is primarily the domain of Washington's business sector, appropriate state and local policies, particularly those relating to education, public safety, infrastructure, cost of doing business, and the environment, are essential to promote higher standards of living.

The benchmarks considered in this study focus on the four themes specified in the Substitute House Bill 2758, RCW 82.33A: quality of life, education and skills of the workforce, infrastructure, and the cost of doing business. These guidelines are specified in the legislation because state and local policies can affect their overall performance. In addition, this study also presents economic performance indicators related to income, employment, population, research and development expenditures, and foreign trade. Overall, forty-one indicators are presented.

## **Changes to the Economic Climate Study**

In response to recommendations from the Washington Competitiveness Council, the Economic Climate Study Advisory Board met several times in 2001 and 2002 to consider the addition of new climate study indicators and changes to current indicators. These meetings resulted in the addition of eight new indicators with a ninth to follow next year, changes to two indicators, and additional information in the supporting text of two indicators.

Indicators that are newly included this year are:

- Median Household Income
- Growth in Personal Income
- Per Capita University Research and Development Spending
- Per Capita Industry Research and Development Spending
- Per Capita Total Research and Development Spending
- Housing Opportunity Index
- Tenth Grade WASL Scores
- Value Added per Hour of Labor in Manufacturing

The ninth indicator that will be added in the next publication will be a measure of the time required to process land use and/or environmental permits. This measure is being developed with the cooperation of state and local regulatory permitting agencies and will track annual improvements in permit processing speed.

Changes were made to the indicators for labor and energy costs in the "Cost of Doing Business" category. While the previous energy cost indicator was an average cost for all forms of energy, the Advisory Board decided that electricity cost would provide a more useful indicator for most busi-

nesses. The previous labor cost indicator was “Unit Labor Costs”, which was an index of the average cost for all forms of labor relative to that of the U.S. This indicator was replaced by average state wages in 2000 broken into twenty-two occupational sectors.

Further information was added to the supporting text in the indicators “Total Employment Growth Rate” and “State and Local Tax Collections per \$1,000 Personal Income”. These changes were the addition of a table of employment levels to the employment growth indicator and of the latest estimate of the incidence of Washington taxes on households versus businesses in the tax measure.

## **Recent Performance**

Thirty-three of the forty-one benchmarks and indicators have been updated this year. Of the updated benchmarks and indicators that include ranks, Washington’s rank improved in seven cases, regressed in nineteen, and stayed the same in four. Performance improved in fifteen cases, worsened in fourteen and stayed the same in two. Data was not available at the time of publication for the eight indicators and benchmarks that were not updated.

Due to the fact that Washington’s economy started its downturn into the recent recession before most of the other states, many of the indicators that the state has historically been strong in were among its worst performers this year. This can be seen widely in categories related to the rate of growth in employment, earnings, and income. While the rate of growth of these indicators has slowed, however, Washington’s levels of income and earnings still rank highly in comparison to the other states and the national averages. Overall, Washington’s performance in the ranked indicators remains above average, with top ten rankings in over a quarter of the indicators and top half rankings in over two-thirds.

The following table is a snapshot of Washington’s performance and ranking compared to last year’s climate study. The analysis of the Washington’s economic climate relative to the other forty-nine states and the nation as a whole begins on page six. The description of each indicator and benchmark is followed by their associated tables and charts. In each case, the ranking is from best to worst with one being the best.

<b>Indicator/Benchmark</b>	<b>Performance</b>	<b>Rank</b>
<b><i>Economic Performance</i></b>		
Total Employment Growth Rate	Worsened	Worsened
Median Household Income	Worsened	Worsened
Per Capita Personal Income	Improved	Worsened
Growth in Personal Income	Worsened	Worsened
High Wage Industries' Share of Total Employment Growth	Improved	Worsened
Annual Earnings Per Job	Improved	Same
Annual Earnings Per Job Growth Rate	Worsened	Worsened
Migration Rate	No Update	No Update
Foreign Exports	Improved	Improved
Foreign Exports Excluding Transportation Equipment	Worsened	Same
University Research and Development Spending	Improved	Worsened
Industry Research and Development Spending	Improved	Improved
Per Capita Total Research and Development Spending	Improved	Improved
Unemployment Rate	Worsened	Worsened
<b><i>Quality of Life</i></b>		
Homicide	Worsened	Worsened
Violent Crime	Improved	Worsened
Arrest Rates for Violent Crime	Worsened	Worsened
Air Quality	No Update	No Update
Drinking Water	Worsened	Worsened
Toxins Released	Worsened	Worsened
State Health Index	Same	Worsened
State Parks and Recreation Areas	Improved	Same
State Arts	Improved	Improved
Public Library Service	Worsened	Worsened
Housing Opportunity Index	n/a	n/a
<b><i>Education and Skills of the Workforce</i></b>		
Fourth Grade Reading	No Update	No Update
Fourth Grade Math	No Update	No Update
Tenth Grade WASL Scores	Improved	n/a
Student to Teacher Ratio	Improved	Same
Education Attainment: Completed Four Years of High School or More	No Update	No Update
Education Attainment: Completed Bachelor's Degree or More	No Update	No Update
Total Public Two and Four Year Combined Participation Rate	No Update	No Update
Value Added per Hour of Labor in Manufacturing	Improved	Improved
<b><i>Infrastructure</i></b>		
Interstate Miles in Poor Condition	Same	Worsened
Urban Roadway Congestion Index	Improved	Improved
FAA Air Traffic	Worsened	Worsened
<b><i>Cost of Doing Business</i></b>		
State and Local Tax Collections Per \$1,000 Personal Income	Improved	Improved
Unemployment Insurance Costs	Worsened	Worsened
Workers' Compensation Premium Costs	No Update	No Update
Electricity Costs	Worsened	Worsened
Average Wage by Sector	N/A	N/A



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# **Economic Performance**

# Total Employment Growth Rate

The longest expansionary period on record for the U.S. economy ended in March 2001, exactly ten years after it began. Concurrent with the end of the expansion, seasonally adjusted payroll employment began to decline as well. Even so, on an annual average basis, total U.S. payroll employment managed to grow by a scant 0.2 percent from 2000 to 2001. Washington, however, along with 19 other states, posted negative employment growth during this period.

As the Boeing Company is Washington's largest private employer, the state's employment growth rate has historically followed the fluctuations of the aerospace cycle. The period from 1999 through 2001, however, was more strongly influenced by the information technology/"dot.com" boom and subsequent bust. Strong growth in these sectors managed to keep the state's employment growth near or above the national average rate in 1999 and 2000 even though aerospace jobs declined by over 20 percent during the same period. During the subsequent employment decline from 2000 to 2001, average aerospace employment levels remained relatively stable (since the recent round of layoffs began late in the year), while average total employment declined by 0.5 percent. This employment decline came from declines in not only the information technology sectors, but from construction and manufacturing other than aerospace as well.

## Total Washington Payroll Employment

1997	1998	1999	2000	2001
2,514,200	2,594,900	2,648,700	2,711,300	2,697,800

Chart 1  
Total Employment Growth Rate

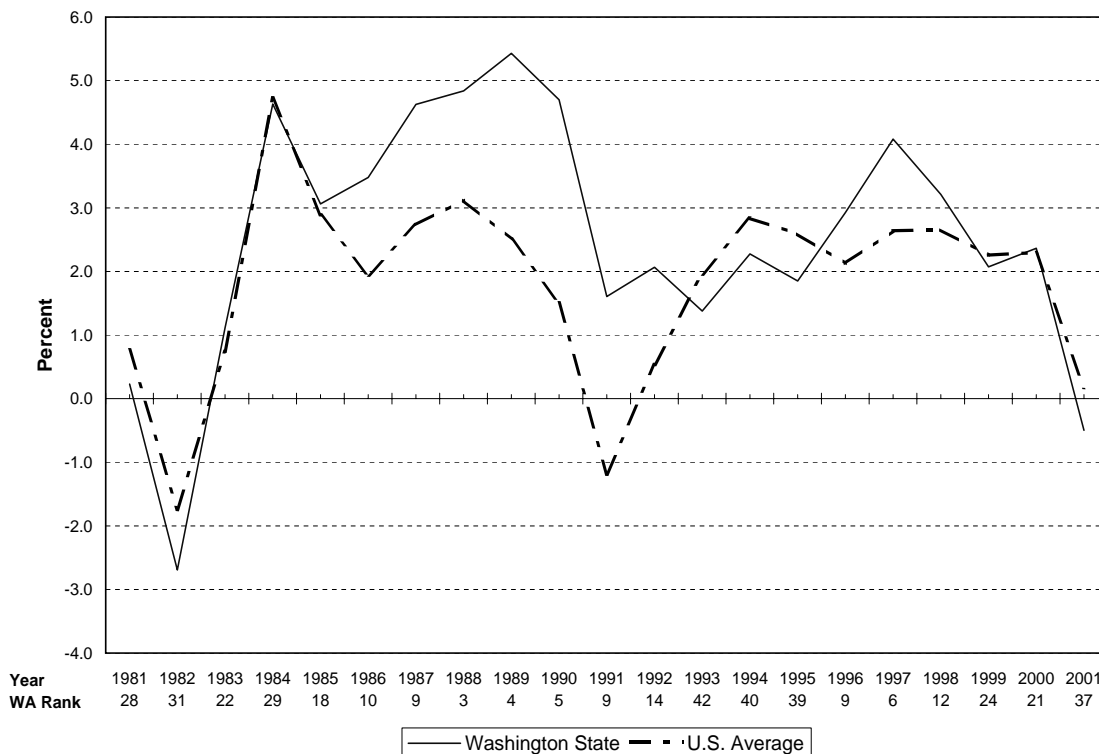


Table 1  
Economic Performance  
**Total Employment Growth Rate**  
(Percent)

	1997	1998	1999	2000	2001	1997-01
Alabama	2.1	1.7	1.1	0.6	-0.9	0.9
Alaska	1.9	2.3	1.0	2.2	2.1	1.9
Arizona	4.9	4.5	4.3	3.7	1.0	3.7
Arkansas	1.7	1.6	1.7	1.5	-0.2	1.3
California	3.0	3.6	2.9	3.5	1.4	2.9
Colorado	4.2	3.9	3.6	3.8	0.9	3.3
Connecticut	1.8	1.9	1.6	1.4	-0.6	1.2
Delaware	3.1	3.2	3.2	1.7	-0.2	2.2
Florida	3.7	3.5	2.9	3.7	1.7	3.1
Georgia	2.5	3.5	3.0	2.5	0.1	2.3
Hawaii	0.2	-0.1	0.7	3.1	0.4	0.9
Idaho	3.4	2.3	3.3	3.8	1.8	2.9
Illinois	1.5	2.2	1.0	1.5	-0.7	1.1
Indiana	1.6	2.1	1.8	1.0	-2.1	0.9
Iowa	1.7	2.5	1.8	0.7	-0.6	1.2
Kansas	3.4	3.5	1.1	1.3	0.9	2.0
Kentucky	2.4	2.4	2.4	1.6	-0.4	1.7
Louisiana	2.2	2.1	0.4	1.2	0.6	1.3
Maine	2.1	2.8	3.0	2.9	1.0	2.4
Maryland	2.5	2.5	2.7	2.7	0.8	2.2
Massachusetts	2.4	2.2	1.8	2.7	0.3	1.9
Michigan	2.0	1.4	1.6	2.0	-1.9	1.0
Minnesota	2.4	2.6	2.3	2.4	-0.1	1.9
Mississippi	1.7	2.4	1.7	0.0	-1.7	0.8
Missouri	2.8	1.7	1.6	0.8	-0.6	1.3
Montana	1.3	2.2	2.0	1.9	1.1	1.7
Nebraska	2.3	2.6	1.9	1.8	0.1	1.7
Nevada	5.7	4.0	6.2	4.5	2.6	4.6
New Hampshire	3.0	3.3	2.9	2.7	0.8	2.5
New Jersey	2.4	2.1	2.6	2.4	0.7	2.0
New Mexico	2.0	1.6	1.3	2.1	1.6	1.7
New York	1.6	2.1	2.7	2.1	-0.0	1.7
North Carolina	3.3	3.0	2.6	1.6	-0.8	1.9
North Dakota	1.7	1.7	1.4	1.2	0.6	1.3
Ohio	1.8	1.7	1.5	1.1	-1.0	1.0
Oklahoma	2.9	3.5	1.4	1.9	1.3	2.2
Oregon	3.5	1.7	1.5	2.0	-0.7	1.6
Pennsylvania	1.9	1.6	1.7	1.9	0.2	1.4
Rhode Island	1.9	1.8	1.6	2.4	0.5	1.6
South Carolina	2.7	3.7	2.7	1.6	-1.3	1.9
South Dakota	1.8	2.3	2.8	1.2	0.4	1.7
Tennessee	2.0	2.1	1.8	1.6	-0.6	1.4
Texas	4.3	3.9	2.5	3.0	0.8	2.9
Utah	4.1	3.0	2.5	2.6	0.6	2.5
Vermont	1.6	2.0	2.3	2.5	0.1	1.7
Virginia	3.1	2.7	2.8	3.1	0.3	2.4
<b>Washington</b>	<b>4.1</b>	<b>3.2</b>	<b>2.1</b>	<b>2.4</b>	<b>-0.5</b>	<b>2.2</b>
West Virginia	1.3	1.6	0.9	1.3	-0.1	1.0
Wisconsin	2.1	2.3	2.4	1.8	-0.3	1.7
Wyoming	1.5	1.7	2.1	2.7	2.6	2.1
U.S. Average	2.6	2.7	2.3	2.3	0.2	2.0
<b>Washington's Rank</b>	<b>6</b>	<b>12</b>	<b>24</b>	<b>21</b>	<b>37</b>	<b>13</b>

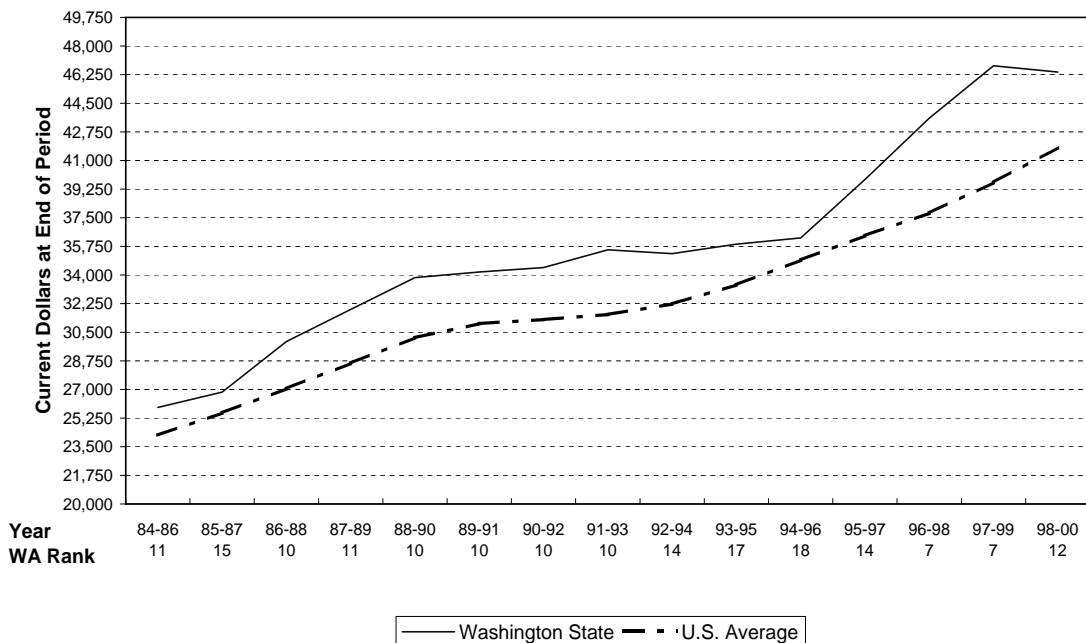
# Median Household Income

A state's median household income is the level of income (before taxes) at which exactly half of that state's households earn more than that amount and half earn less. While it is related to average or per capita household income, an increase in average household income does not necessarily mean that median household income will increase and vice versa. Median income measures offer the advantage over average measures that they are not upwardly biased by the income levels of the highest-income households. Typically, the average or per capita household income of a state is higher than the median.

Median household income estimates for the states are produced annually by the U.S. Bureau of the Census and are published in Money Income in the United States. These estimates are derived from the annual Current Population Survey. As this survey's primary purpose, however, is to arrive at national income and demographic numbers, estimates for individual states have substantial margins of error. To minimize these errors, the Census Bureau reports and recommends using two or three year moving averages for state median household income estimates. Even so, the margins of error remain significant. For example, the Census Bureau reports that the 90 percent confidence interval for Washington's average estimate of \$46,412 for the years 1998-2000 is plus or minus \$2,039. Using this margin of error, Washington's ranking among the states for that period could be as high as 7<sup>th</sup> or as low as 17<sup>th</sup>, and it cannot be said with certainty that its median household income actually declined from the previous period as reported. Nevertheless, within the reported margins of error, general state-to-state and year-to-year comparisons can be made.

While Washington's median household income estimate of \$46,412 for 1998-2000 was slightly lower than that of the previous period, it was still substantially above the national median of \$41,789. The state's average median income for the years 1996-2000 (in year 2000 dollars) of \$45,409 was also well above the national median for that period of \$40,752, ranking 11<sup>th</sup>. Washington's median household income has been higher than that of the nation for all of the years that the Current Population Survey has reported state estimates.

Chart 2  
Median Household Income



**Table 2**  
**Economic Performance**  
**Median Household Income**  
(Current Dollars at End of Period)

	<b>1994-96</b>	<b>1995-97</b>	<b>1996-98</b>	<b>1997-99</b>	<b>1998-00</b>	<b>1996-2000*</b>
Alabama	28,618	30,103	33,394	35,478	36,268	35,221
Alaska	50,060	50,829	51,421	51,046	52,492	53,309
Arizona	32,180	32,535	34,402	36,337	39,653	37,715
Arkansas	26,922	27,031	27,471	28,398	30,082	29,578
California	38,106	39,458	40,522	42,262	45,070	44,023
Colorado	40,971	42,664	44,349	46,950	49,216	47,743
Connecticut	42,353	43,151	44,978	47,997	50,647	49,012
Delaware	37,749	40,009	42,000	44,627	47,438	46,269
Florida	30,759	31,708	33,234	35,081	37,305	36,028
Georgia	33,639	35,272	36,553	39,003	41,481	39,838
Hawaii	43,541	42,931	41,932	42,864	45,657	45,300
Idaho	33,912	34,441	35,554	36,023	37,760	37,392
Illinois	38,630	40,613	42,065	44,459	46,649	45,472
Indiana	33,004	36,667	38,580	40,635	41,315	40,779
Iowa	34,933	35,054	35,276	38,047	41,560	39,417
Kansas	31,269	33,919	35,867	37,618	38,393	37,995
Kentucky	30,420	32,668	34,633	35,226	36,826	36,339
Louisiana	28,740	31,217	32,317	33,218	32,500	33,236
Maine	33,883	34,641	34,989	36,459	39,815	38,500
Maryland	42,582	44,970	47,711	50,630	52,846	51,298
Massachusetts	40,695	41,016	42,017	43,697	45,769	45,096
Michigan	38,027	39,076	40,639	43,066	46,034	44,489
Minnesota	38,554	41,482	44,579	46,802	50,088	48,125
Mississippi	26,963	27,912	28,592	30,628	31,963	31,107
Missouri	34,027	36,093	37,640	40,166	44,247	41,864
Montana	28,838	29,262	30,348	31,280	32,553	32,054
Nebraska	33,858	34,722	35,661	37,338	39,029	38,272
Nevada	37,889	38,760	39,751	40,882	43,262	42,694
New Hampshire	39,016	40,854	42,511	44,891	48,029	46,201
New Jersey	45,817	47,612	49,303	50,234	51,739	51,698
New Mexico	26,776	27,707	29,386	31,981	34,035	32,343
New York	34,395	35,601	36,845	38,479	40,822	39,894
North Carolina	33,469	35,312	36,407	37,057	38,413	38,498
North Dakota	30,452	31,496	31,717	32,238	33,769	33,926
Ohio	34,589	35,928	37,005	38,970	41,972	40,365
Oklahoma	27,700	29,042	31,357	33,311	34,020	33,123
Oregon	35,414	37,287	37,922	39,768	41,915	40,884
Pennsylvania	34,797	36,525	37,791	38,938	41,394	40,495
Rhode Island	35,730	36,623	38,150	40,213	43,428	41,628
South Carolina	32,064	33,446	34,692	35,376	36,671	36,903
South Dakota	30,485	30,349	31,205	33,438	35,986	34,399
Tennessee	30,327	30,896	32,397	34,393	35,874	34,817
Texas	32,872	34,216	35,254	37,320	39,296	38,313
Utah	37,469	39,694	42,073	45,257	46,539	45,181
Vermont	35,028	34,592	36,196	39,419	40,908	39,125
Virginia	38,787	40,405	42,572	44,884	47,701	46,379
Washington	<b>36,265</b>	<b>39,846</b>	<b>43,593</b>	<b>46,788</b>	<b>46,412</b>	<b>45,409</b>
West Virginia	25,270	26,505	26,950	28,420	29,217	28,930
Wisconsin	39,877	41,215	41,032	43,055	45,441	44,490
Wyoming	32,833	32,764	33,783	36,039	38,291	36,894
U.S. Average**	34,911	36,399	37,779	39,657	41,789	40,752
<b>Washington's Rank</b>	<b>18</b>	<b>14</b>	<b>7</b>	<b>7</b>	<b>12</b>	<b>11</b>

Source: U.S. Department of Commerce, Bureau of the Census

\*Average of yearly estimates in 2000 dollars

\*\*U.S. average includes the District of Columbia

# Per Capita Personal Income

The Bureau of Economic Analysis defines personal income as the sum of earnings, dividends, interest, rent, and transfer payments. Per capita personal income is derived by dividing the total personal income of a region by its population. In 2001, Washington had a total personal income of \$191.76 billion and a population of 5.99 million, for a per capita personal income of \$32,025. This level of income ranked 13<sup>th</sup> among the states and was well above the national average of \$30,472. While Washington's per capita personal income increased \$398 from 2000 to 2001, its ranking among the states decreased from 11<sup>th</sup>.

Most of Washington's personal income derives from earnings, which consists mainly of wages and salaries but also includes proprietor's income and other labor income. In 2001, earnings by Washington residents net of personal contributions to social insurance totaled \$131.24 billion, or 68.4 percent of total personal income. Income from transfer payments was \$24.24 billion, and income from dividends, interest, and rent was \$36.28 billion. These income sources represented 12.6 and 18.9 percent of total personal income respectively.

Chart 3  
Per Capita Personal Income

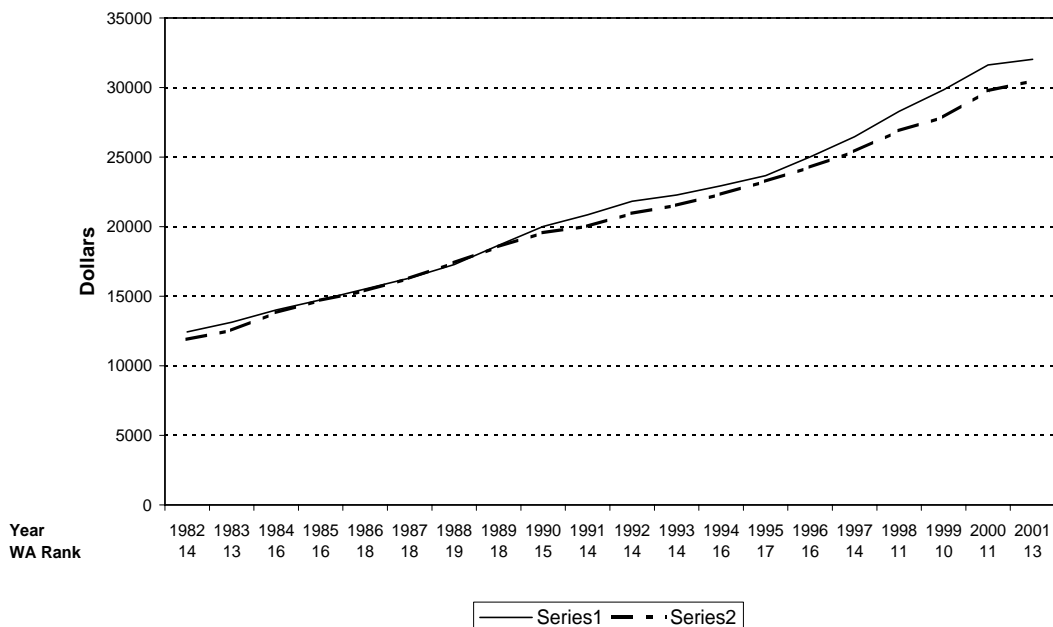


Table 3  
Economic Performance  
**Per Capita Personal Income**  
(Dollars)

	1997	1998	1999	2000	2001	1997-2001
Alabama	20,899	21,904	22,693	23,766	24,589	22,770
Alaska	26,898	27,645	28,122	29,913	30,936	28,703
Arizona	21,892	23,118	23,937	25,358	25,872	24,035
Arkansas	19,628	20,479	21,119	22,108	22,887	21,244
California	26,521	28,240	29,698	32,334	32,702	29,899
Colorado	27,067	28,764	30,334	33,018	33,470	30,531
Connecticut	34,759	37,108	38,614	41,392	42,435	38,862
Delaware	26,807	28,662	29,354	31,500	32,472	29,759
Florida	24,869	26,161	26,951	28,286	28,947	27,043
Georgia	23,911	25,447	26,571	28,212	28,733	26,575
Hawaii	25,765	26,201	26,913	28,301	29,002	27,236
Idaho	20,534	21,612	22,679	24,101	24,621	22,709
Illinois	27,950	29,505	30,227	32,248	33,023	30,591
Indiana	23,418	24,891	25,628	27,228	27,783	25,790
Iowa	23,499	24,555	24,990	26,572	27,331	25,389
Kansas	24,182	25,519	26,121	27,537	28,565	26,385
Kentucky	20,979	22,118	22,671	24,244	24,923	22,987
Louisiana	20,874	21,948	22,204	23,227	24,535	22,558
Maine	22,134	23,404	24,187	25,681	26,723	24,426
Maryland	28,857	30,455	31,829	33,959	35,188	32,058
Massachusetts	30,773	32,714	34,322	37,960	38,907	34,935
Michigan	25,509	26,860	27,942	29,516	29,788	27,923
Minnesota	27,086	29,092	30,141	32,207	33,101	30,325
Mississippi	18,580	19,635	20,124	21,017	21,750	20,221
Missouri	23,926	25,171	25,865	27,452	28,226	26,128
Montana	19,920	21,225	21,593	22,895	23,963	21,919
Nebraska	24,148	25,541	26,558	27,756	28,886	26,578
Nevada	26,789	28,069	28,598	29,696	29,897	28,610
New Hampshire	27,238	29,187	30,485	33,576	34,138	30,925
New Jersey	31,720	33,640	34,549	37,649	38,509	35,213
New Mexico	19,641	20,551	20,891	21,837	23,155	21,215
New York	29,670	31,478	32,617	35,016	36,019	32,960
North Carolina	23,468	24,661	25,504	27,055	27,514	25,640
North Dakota	20,520	22,716	23,043	25,007	25,902	23,438
Ohio	24,772	25,921	26,864	28,202	28,816	26,915
Oklahoma	20,739	21,930	22,540	24,046	25,071	22,865
Oregon	24,385	25,446	26,248	27,821	28,165	26,413
Pennsylvania	25,635	27,008	27,924	29,713	30,720	28,200
Rhode Island	25,643	26,837	27,632	29,258	30,215	27,917
South Carolina	20,998	22,115	22,958	24,273	24,886	23,046
South Dakota	21,885	23,453	24,477	25,823	26,664	24,460
Tennessee	22,814	24,101	25,026	26,367	26,988	25,059
Texas	23,756	25,398	26,237	28,035	28,581	26,401
Utah	20,613	21,594	22,202	23,476	24,180	22,413
Vermont	23,026	24,547	25,705	27,376	28,594	25,850
Virginia	26,385	27,968	29,276	31,320	32,431	29,476
<b>Washington</b>	<b>26,469</b>	<b>28,285</b>	<b>29,836</b>	<b>31,627</b>	<b>32,025</b>	<b>29,648</b>
West Virginia	19,351	20,234	20,691	21,861	22,881	21,004
Wisconsin	24,481	26,004	26,976	28,471	29,270	27,040
Wyoming	23,360	24,714	26,139	27,767	29,416	26,279
U.S. Average*	25,412	26,893	27,880	29,770	30,472	28,085
<b>Washington's Rank</b>	<b>14</b>	<b>11</b>	<b>10</b>	<b>11</b>	<b>13</b>	<b>12</b>

\*The U.S. Average includes Washington D.C., which makes it higher than the 50 State Average  
Source: Bureau of Economic Analysis, U.S. Department of Commerce, September 23, 2002



# Per Capita Personal Income Growth Rate

The growth rate of per capita personal income is affected by the growth rate of the components of total personal income as well as the growth rate of population. From 2000 to 2001, Washington's total personal income grew by 2.6 percent while population grew at 1.3 percent. As a result, per capita personal income grew by 1.3 percent, which ranked 46<sup>th</sup> among the states. During the same period, U.S. total personal income grew by 3.3 percent while its population grew at 0.9 percent, for a per capita personal income growth rate of 2.4 percent.

Most of the difference between the growth rates of Washington and U.S. total personal income was in the earnings component. From 2000 to 2001, Washington total earnings grew at 0.9 percent while U.S. total earnings grew at 2.4%. This difference in earnings growth stemmed from Washington's negative payroll employment growth during the period as compared to slight positive growth in the U.S. as a whole. Though Washington per capita personal income growth has lagged that of the U.S. for the last two years, its average growth rate for the last five years ranked 10<sup>th</sup> among the states.

Chart 4  
Per Capita Personal Income Growth Rate

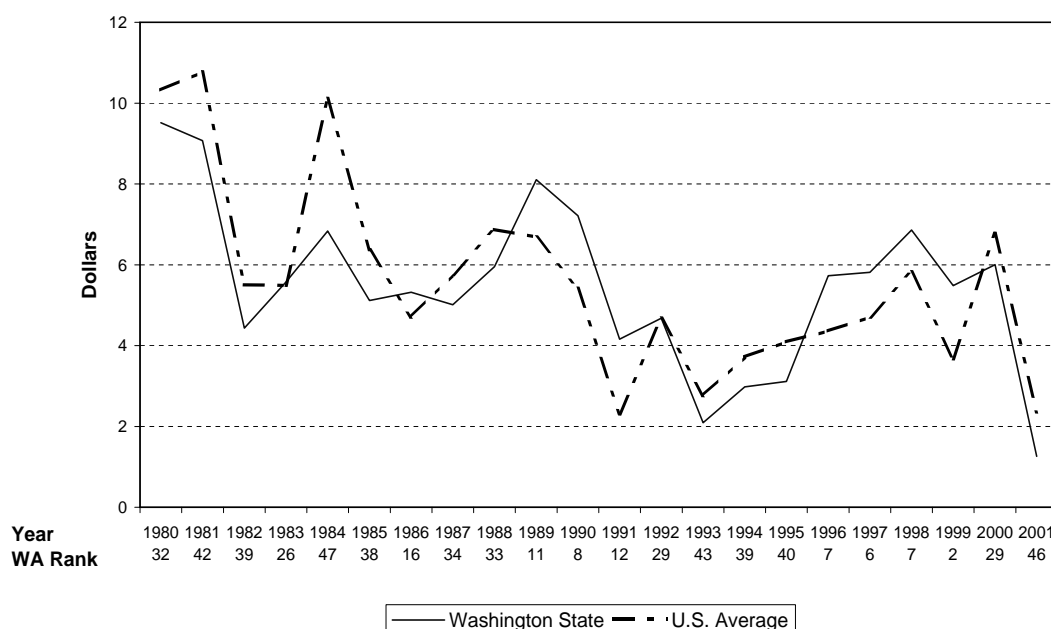


Table 4  
Economic Performance  
**Per Capita Personal Income Growth Rate**  
(Percent)

	1997	1998	1999	2000	2001	1997-01
Alabama	3.8	4.8	3.6	4.7	3.5	4.1
Alaska	3.8	2.8	1.7	6.4	3.4	3.6
Arizona	4.8	5.6	3.5	5.9	2.0	4.4
Arkansas	3.7	4.3	3.1	4.7	3.5	3.9
California	4.5	6.5	5.2	8.9	1.1	5.2
Colorado	6.1	6.3	5.5	8.8	1.4	5.6
Connecticut	6.1	6.8	4.1	7.2	2.5	5.3
Delaware	2.6	6.9	2.4	7.3	3.1	4.5
Florida	4.0	5.2	3.0	5.0	2.3	3.9
Georgia	3.7	6.4	4.4	6.2	1.8	4.5
Hawaii	2.0	1.7	2.7	5.2	2.5	2.8
Idaho	2.2	5.2	4.9	6.3	2.2	4.2
Illinois	4.8	5.6	2.4	6.7	2.4	4.4
Indiana	4.1	6.3	3.0	6.2	2.0	4.3
Iowa	4.6	4.5	1.8	6.3	2.9	4.0
Kansas	5.2	5.5	2.4	5.4	3.7	4.5
Kentucky	5.1	5.4	2.5	6.9	2.8	4.6
Louisiana	4.5	5.1	1.2	4.6	5.6	4.2
Maine	4.6	5.7	3.3	6.2	4.1	4.8
Maryland	4.8	5.5	4.5	6.7	3.6	5.0
Massachusetts	5.5	6.3	4.9	10.6	2.5	6.0
Michigan	4.6	5.3	4.0	5.6	0.9	4.1
Minnesota	4.6	7.4	3.6	6.9	2.8	5.0
Mississippi	4.4	5.7	2.5	4.4	3.5	4.1
Missouri	4.8	5.2	2.8	6.1	2.8	4.3
Montana	3.9	6.6	1.7	6.0	4.7	4.6
Nebraska	2.0	5.8	4.0	4.5	4.1	4.1
Nevada	3.0	4.8	1.9	3.8	0.7	2.8
New Hampshire	5.8	7.2	4.4	10.1	1.7	5.9
New Jersey	4.8	6.1	2.7	9.0	2.3	5.0
New Mexico	3.6	4.6	1.7	4.5	6.0	4.1
New York	3.9	6.1	3.6	7.4	2.9	4.8
North Carolina	5.0	5.1	3.4	6.1	1.7	4.3
North Dakota	-1.9	10.7	1.4	8.5	3.6	4.5
Ohio	5.4	4.6	3.6	5.0	2.2	4.2
Oklahoma	4.5	5.7	2.8	6.7	4.3	4.8
Oregon	4.8	4.4	3.2	6.0	1.2	3.9
Pennsylvania	4.8	5.4	3.4	6.4	3.4	4.7
Rhode Island	5.5	4.7	3.0	5.9	3.3	4.5
South Carolina	4.5	5.3	3.8	5.7	2.5	4.4
South Dakota	2.3	7.2	4.4	5.5	3.3	4.5
Tennessee	3.6	5.6	3.8	5.4	2.4	4.2
Texas	7.2	6.9	3.3	6.9	1.9	5.2
Utah	5.6	4.8	2.8	5.7	3.0	4.4
Vermont	4.6	6.6	4.7	6.5	4.4	5.4
Virginia	4.8	6.0	4.7	7.0	3.5	5.2
<b>Washington</b>	<b>5.8</b>	<b>6.9</b>	<b>5.5</b>	<b>6.0</b>	<b>1.3</b>	<b>5.1</b>
West Virginia	4.4	4.6	2.3	5.7	4.7	4.3
Wisconsin	5.1	6.2	3.7	5.5	2.8	4.7
Wyoming	7.5	5.8	5.8	6.2	5.9	6.2
U.S. Average*	4.7	5.8	3.7	6.8	2.4	4.7
<b>Washington's Rank</b>	<b>6</b>	<b>7</b>	<b>2</b>	<b>29</b>	<b>46</b>	<b>10</b>

\*The U.S. Average includes Washington D.C.

Source: Bureau of Economic Analysis, U.S. Department of Commerce, September 23, 2002

# High Wage Industries' Share of Total Employment Growth

Washington's high wage employment growth is highly correlated to the aerospace and technology sectors. Washington has historically ranked moderately well in the area of high wage employment growth. Aerospace expansion coupled with continued growth in software boosted state performance between 1996 and 1998; 1996-97 was an exceptional period with 50.4 percent of job growth occurring in high wage sectors. This expansion, however, reversed itself over the next two years as average aerospace employment declined 12 percent in 1998-99 and 13 percent in 1999-2000. As a result, Washington's 1999-2000 share of high wage industry employment growth as a percent of total employment growth was 19.6 percent, ranking 47<sup>th</sup> among the states and well below the national average of 35.2 percent.

Absent the aerospace cycle, Washington's recent rankings would have improved considerably. Nevertheless, over the five year period preceding 2000 Washington's high wage industries' share of total employment growth was above the national average, ranking 20<sup>th</sup> among the states.

Chart 5  
High Wage Industries' Share of Total Employment Growth

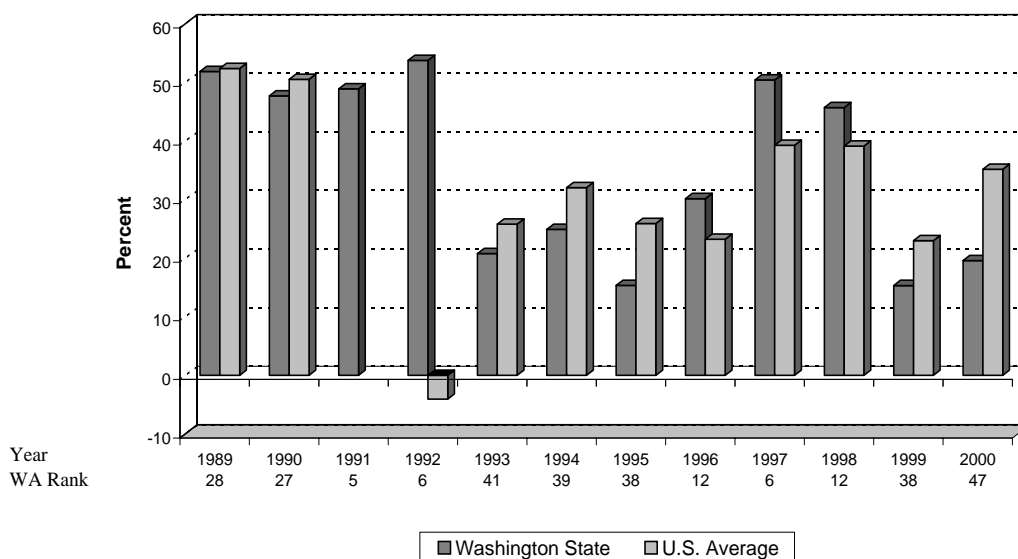


Table 5  
Economic Performance  
**High Wage Industries' Share of Total Employment Growth**  
(Percent)

	1995-96	1996-97	1997-98	1998-99	1999-00	1995-00
Alabama	17.6	36.3	39.5	5.5	46.2	30.2
Alaska	-32.8	19.9	-336.5	1008.2	44.1	20.4
Arizona	33.9	32.4	36.8	14.7	37.2	32.0
Arkansas	20.6	43.4	46.5	21.8	53.0	38.0
California	20.7	42.8	34.5	23.8	36.6	32.8
Colorado	22.2	34.7	40.6	29.9	29.9	32.6
Connecticut	-2.6	32.5	30.6	9.3	18.7	21.0
Delaware	11.1	35.1	57.4	23.2	37.0	31.9
Florida	33.3	36.6	33.8	22.9	25.7	29.8
Georgia	29.0	43.5	48.0	34.1	36.4	37.3
Hawaii	1789.3*	-124.7	23.4	-19.5	29.6	2.7
Idaho	36.7	41.3	23.8	60.9	38.5	40.5
Illinois	12.2	36.3	34.2	14.5	29.2	27.1
Indiana	15.9	37.9	36.2	26.5	30.3	31.9
Iowa	11.5	53.7	50.0	23.9	48.8	37.6
Kansas	16.5	47.5	41.6	22.3	44.8	38.6
Kentucky	33.0	44.0	59.4	31.8	44.1	43.7
Louisiana	33.1	38.5	39.8	-79.2	2.0	23.5
Maine	26.2	22.6	37.8	46.0	39.0	38.4
Maryland	13.2	36.9	37.9	25.3	32.5	31.3
Massachusetts	21.9	36.5	39.4	10.3	25.3	29.7
Michigan	27.8	32.8	32.7	23.4	42.6	33.7
Minnesota	38.9	44.5	31.3	40.1	39.0	39.8
Mississippi	22.5	28.8	56.9	9.1	36.1	31.3
Missouri	39.9	45.4	33.1	26.2	28.7	37.8
Montana	12.9	29.5	34.8	38.5	36.1	31.6
Nebraska	12.6	49.7	46.7	28.6	46.0	37.3
Nevada	26.8	27.1	38.2	21.0	31.3	28.5
New Hampshire	35.6	36.7	37.3	26.4	31.9	34.1
New Jersey	1.2	40.2	39.7	28.0	38.9	35.0
New Mexico	15.2	36.8	21.5	-1.0	40.8	27.7
New York	-18.6	37.1	33.1	26.1	32.6	29.0
North Carolina	39.3	42.2	49.1	36.7	55.3	43.4
North Dakota	25.5	67.8	33.1	55.2	57.6	43.2
Ohio	22.2	38.9	40.1	20.8	28.2	32.1
Oklahoma	14.0	48.6	41.9	-4.4	34.8	33.6
Oregon	30.9	40.4	51.3	21.7	37.6	37.1
Pennsylvania	-4.1	40.8	34.1	21.6	26.9	28.1
Rhode Island	19.2	54.2	40.4	24.4	35.2	37.5
South Carolina	26.0	39.0	53.9	46.0	72.1	48.6
South Dakota	13.4	64.2	36.7	41.3	37.6	38.6
Tennessee	30.1	31.6	43.2	28.9	26.7	33.0
Texas	29.4	44.4	44.5	15.0	39.9	37.5
Utah	33.3	35.7	41.2	21.1	24.3	33.5
Vermont	7.1	22.8	30.7	49.3	46.7	34.3
Virginia	22.5	24.4	33.6	27.9	44.6	31.7
<b>Washington</b>	<b>30.2</b>	<b>50.4</b>	<b>45.7</b>	<b>15.3</b>	<b>19.6</b>	<b>36.3</b>
West Virginia	14.6	28.7	29.9	-34.6	18.6	20.5
Wisconsin	29.4	43.1	47.9	23.5	36.9	38.2
Wyoming	0.4	81.9	40.8	21.5	57.0	41.1
U.S. Average	23.3	39.3	39.1	23.0	35.2	33.4
<b>Washington's Rank</b>	<b>12</b>	<b>6</b>	<b>12</b>	<b>38</b>	<b>47</b>	<b>20</b>

\* Total employment growth rate was negative.

Source: Washington State Office of the Forecast Council based on personal income data provided by the U.S. Department of Commerce, Bureau of Economic Analysis, May 2002.

# Annual Earnings Per Job

The Bureau of Economic Analysis defines earnings as salary income, other labor income, and proprietors' income. Historically, Washington has ranked high in annual earnings per job due to an industry mix that favors high wage employment. Washington's average annual earnings per job increased to \$38,073 in 2000, up \$1,354 from 1999. Washington's national rank remained at 7<sup>th</sup>. Washington's real total earnings (in 1996 constant dollars) have more than tripled in amount from 38.9 billion in 1970 to 120.9 billion in 2000.

Chart 6  
Annual Earnings Per Job

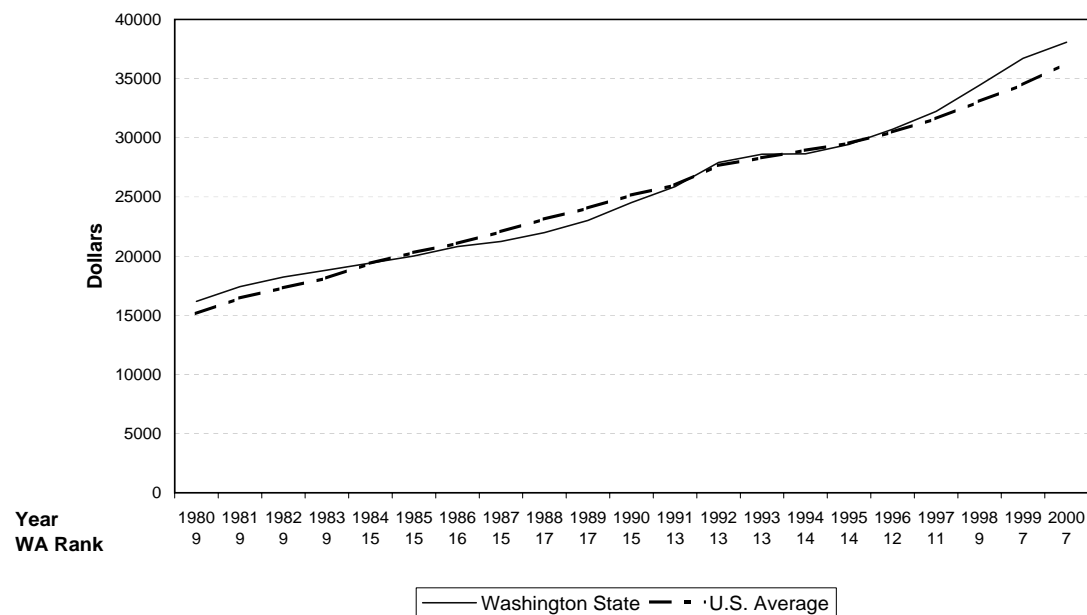


Table 6  
Economic Performance  
**Annual Earnings Per Job**  
(Dollars)

	1996	1997	1998	1999	2000	1996-00
Alabama	26,364	26,933	27,831	28,904	29,670	27,940
Alaska	33,275	33,572	34,211	34,332	35,175	34,113
Arizona	27,473	28,439	29,933	31,174	33,050	30,014
Arkansas	23,676	24,241	25,029	26,096	26,845	25,177
California	33,363	35,060	36,514	38,659	41,986	37,116
Colorado	29,368	30,707	32,465	34,416	36,989	32,789
Connecticut	37,801	40,083	42,187	43,895	46,351	42,063
Delaware	32,135	33,134	34,552	35,634	36,863	34,464
Florida	27,478	28,098	29,260	30,095	31,534	29,293
Georgia	29,779	30,999	32,520	34,146	35,881	32,665
Hawaii	30,084	30,581	31,001	31,523	32,172	31,072
Idaho	24,405	24,523	25,458	26,732	28,103	25,844
Illinois	33,562	34,962	36,333	37,833	39,462	36,430
Indiana	27,412	28,231	29,560	30,454	31,465	29,424
Iowa	24,644	25,346	25,806	26,493	27,806	26,019
Kansas	25,347	26,247	27,232	28,417	29,270	27,303
Kentucky	25,182	26,037	27,056	28,025	29,355	27,131
Louisiana	26,682	27,438	28,496	28,909	29,532	28,211
Maine	24,377	25,054	25,913	26,954	27,656	25,991
Maryland	31,501	32,640	34,072	35,430	37,136	34,156
Massachusetts	35,624	36,927	38,867	41,390	45,120	39,586
Michigan	32,594	33,414	35,254	36,513	37,621	35,079
Minnesota	28,894	29,796	31,697	33,019	34,836	31,648
Mississippi	23,331	24,007	25,002	25,648	26,281	24,854
Missouri	27,101	28,028	29,082	30,051	31,508	29,154
Montana	20,945	21,350	22,350	23,074	23,653	22,274
Nebraska	26,110	26,306	27,074	28,139	28,876	27,301
Nevada	30,420	30,958	32,712	33,915	34,891	32,579
New Hampshire	28,227	29,496	31,137	32,379	34,752	31,198
New Jersey	38,571	39,943	41,882	43,437	45,751	41,917
New Mexico	24,856	25,659	26,657	27,324	28,283	26,556
New York	39,803	41,140	43,312	44,850	47,683	43,358
North Carolina	26,976	27,886	29,049	30,279	32,022	29,242
North Dakota	22,440	20,963	23,357	23,466	24,876	23,020
Ohio	28,818	29,943	31,067	32,009	33,034	30,974
Oklahoma	24,284	25,189	26,188	27,069	28,099	26,166
Oregon	27,287	28,254	29,366	30,739	32,493	29,628
Pennsylvania	31,092	31,996	33,530	34,719	36,006	33,469
Rhode Island	29,228	30,380	31,651	32,685	34,036	31,596
South Carolina	25,377	26,020	27,012	28,105	29,212	27,145
South Dakota	22,777	22,704	23,989	25,042	26,304	24,163
Tennessee	27,256	28,050	29,098	30,162	31,236	29,160
Texas	29,955	31,656	33,595	35,178	37,072	33,491
Utah	25,053	26,010	27,106	28,052	29,203	27,085
Vermont	24,176	24,843	25,809	26,784	28,054	25,933
Virginia	30,010	31,212	32,845	34,433	36,481	32,996
<b>Washington</b>	<b>30,713</b>	<b>32,234</b>	<b>34,435</b>	<b>36,719</b>	<b>38,073</b>	<b>34,435</b>
West Virginia	24,785	25,271	25,833	26,562	27,381	25,966
Wisconsin	26,618	27,524	28,917	29,921	30,807	28,757
Wyoming	23,221	24,471	25,009	26,170	27,037	25,182
U.S. Average	30,493	31,610	33,077	34,480	36,316	33,195
<b>Washington's Rank</b>	<b>12</b>	<b>11</b>	<b>9</b>	<b>7</b>	<b>7</b>	<b>9</b>

Source: US Department of Commerce, Bureau of Economic Analysis ([www.bea.gov](http://www.bea.gov))

# Annual Earnings Per Job Growth Rate

In 2000, the growth rate of annual earnings per job in Washington fell below the national average for the first time since 1994. From 1999 to 2000, Washington earnings per job grew at a rate of 3.7 percent, ranking 30<sup>th</sup> among the states, while U.S. average earnings per job grew at 5.3 percent. During the four years prior to 2000, however, Washington's earnings growth handily outpaced that of the nation, ranking in the top ten for all four years and first in 1999. As a result, Washington's average annual growth rate in earnings per job for the years 1996-2000 was well above the national average, ranking 4<sup>th</sup> among the states.

Chart 7  
Annual Earnings Per Job Growth Rate

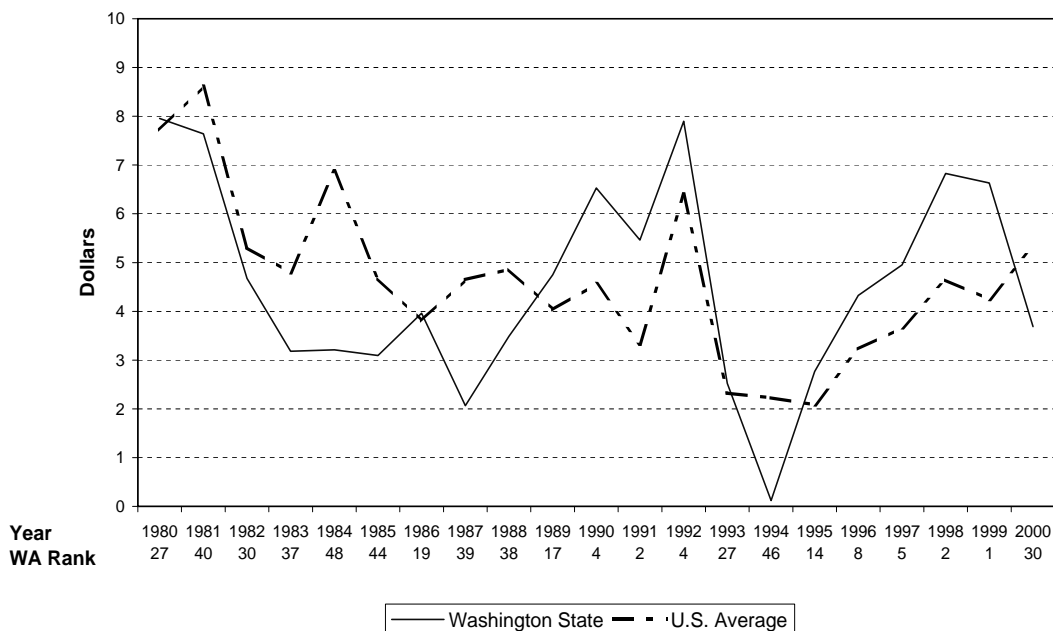


Table 7  
Economic Performance  
**Annual Earnings Per Job Growth Rate**  
(Dollars)

	1996	1997	1998	1999	2000	1996-00
Alabama	2.3	2.2	3.3	3.9	2.7	2.9
Alaska	-0.7	0.9	1.9	0.4	2.5	1.0
Arizona	2.6	3.5	5.3	4.1	6.0	4.3
Arkansas	3.4	2.4	3.3	4.3	2.9	3.2
California	3.0	5.1	4.1	5.9	8.6	5.3
Colorado	3.7	4.6	5.7	6.0	7.5	5.5
Connecticut	2.7	6.0	5.2	4.0	5.6	4.7
Delaware	1.5	3.1	4.3	3.1	3.4	3.1
Florida	2.7	2.3	4.1	2.9	4.8	3.3
Georgia	4.2	4.1	4.9	5.0	5.1	4.6
Hawaii	0.3	1.7	1.4	1.7	2.1	1.4
Idaho	1.4	0.5	3.8	5.0	5.1	3.2
Illinois	4.0	4.2	3.9	4.1	4.3	4.1
Indiana	3.3	3.0	4.7	3.0	3.3	3.5
Iowa	6.4	2.8	1.8	2.7	5.0	3.7
Kansas	4.0	3.6	3.8	4.4	3.0	3.7
Kentucky	3.5	3.4	3.9	3.6	4.7	3.8
Louisiana	1.8	2.8	3.9	1.4	2.2	2.4
Maine	3.1	2.8	3.4	4.0	2.6	3.2
Maryland	2.3	3.6	4.4	4.0	4.8	3.8
Massachusetts	4.5	3.7	5.3	6.5	9.0	5.8
Michigan	-0.5	2.5	5.5	3.6	3.0	2.8
Minnesota	5.9	3.1	6.4	4.2	5.5	5.0
Mississippi	3.2	2.9	4.1	2.6	2.5	3.1
Missouri	3.6	3.4	3.8	3.3	4.8	3.8
Montana	0.4	1.9	4.7	3.2	2.5	2.6
Nebraska	7.9	0.8	2.9	3.9	2.6	3.6
Nevada	2.5	1.8	5.7	3.7	2.9	3.3
New Hampshire	3.8	4.5	5.6	4.0	7.3	5.0
New Jersey	4.1	3.6	4.9	3.7	5.3	4.3
New Mexico	1.8	3.2	3.9	2.5	3.5	3.0
New York	5.4	3.4	5.3	3.6	6.3	4.8
North Carolina	3.0	3.4	4.2	4.2	5.8	4.1
North Dakota	11.3	-6.6	11.4	0.5	6.0	4.5
Ohio	1.5	3.9	3.8	3.0	3.2	3.1
Oklahoma	1.5	3.7	4.0	3.4	3.8	3.3
Oregon	3.6	3.5	3.9	4.7	5.7	4.3
Pennsylvania	3.1	2.9	4.8	3.5	3.7	3.6
Rhode Island	2.7	3.9	4.2	3.3	4.1	3.6
South Carolina	2.7	2.5	3.8	4.0	3.9	3.4
South Dakota	9.3	-0.3	5.7	4.4	5.0	4.8
Tennessee	2.1	2.9	3.7	3.7	3.6	3.2
Texas	3.8	5.7	6.1	4.7	5.4	5.1
Utah	2.2	3.8	4.2	3.5	4.1	3.6
Vermont	3.6	2.8	3.9	3.8	4.7	3.8
Virginia	3.2	4.0	5.2	4.8	5.9	4.6
Washington	<b>4.3</b>	<b>5.0</b>	<b>6.8</b>	<b>6.6</b>	<b>3.7</b>	<b>5.3</b>
West Virginia	1.3	2.0	2.2	2.8	3.1	2.3
Wisconsin	2.8	3.4	5.1	3.5	3.0	3.5
Wyoming	0.0	5.4	2.2	4.6	3.3	3.1
U.S. Average	3.2	3.7	4.6	4.2	5.3	4.2
<b>Washington's Rank</b>	<b>8</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>30</b>	<b>4</b>

Source: US Department of Commerce, Bureau of Economic Analysis ([www.bea.gov](http://www.bea.gov))



# Migration Rate

The U.S. Department of Commerce, Bureau of the Census publishes estimates of the annual increases in state populations that are attributable to natural increase (births minus deaths), domestic migration, and international migration. The effective dates of these estimates are normally July first of each year, with the migration and natural increase numbers showing the change from one July to the next.

Intercensal estimates of population changes from 1990 to 1999 rely on baseline data from the 1990 decennial census, while estimates for the current decade will rely on the 2000 census. The Census Bureau is currently working on revisions to the estimates from 1990-99 to make them consistent with both the 1990 and 2000 censuses. Until these revisions are made, the bureau will not release migration and natural increase estimates for the period from July 1999 to July 2000. It has, however, produced migration and natural increase estimates for the period from April 1, 2000 to July 1, 2001 based upon the 2000 census. These estimates are presented here, although it should be kept in mind that they are not strictly comparable with the estimates for past periods as they represent the changes over 15 months rather than one year.

Washington continues to be a popular destination for migrants, ranking at or above 15<sup>th</sup> among the states since 1985. Its migration rate of 0.8 percent for the April 2000-July 2001 period ranked 13<sup>th</sup> among the states. During this period, Washington's total population growth was 1.6 percent, with half (0.8%) coming from natural increase and half from migration. Of the state's immigrants, roughly 55 percent were international immigrants and 45 percent domestic. Total U.S. population growth for the same period was 1.2 percent, with 0.7 percent of its growth from natural increase and 0.5 percent from migration.

Chart 8  
Migration Rate

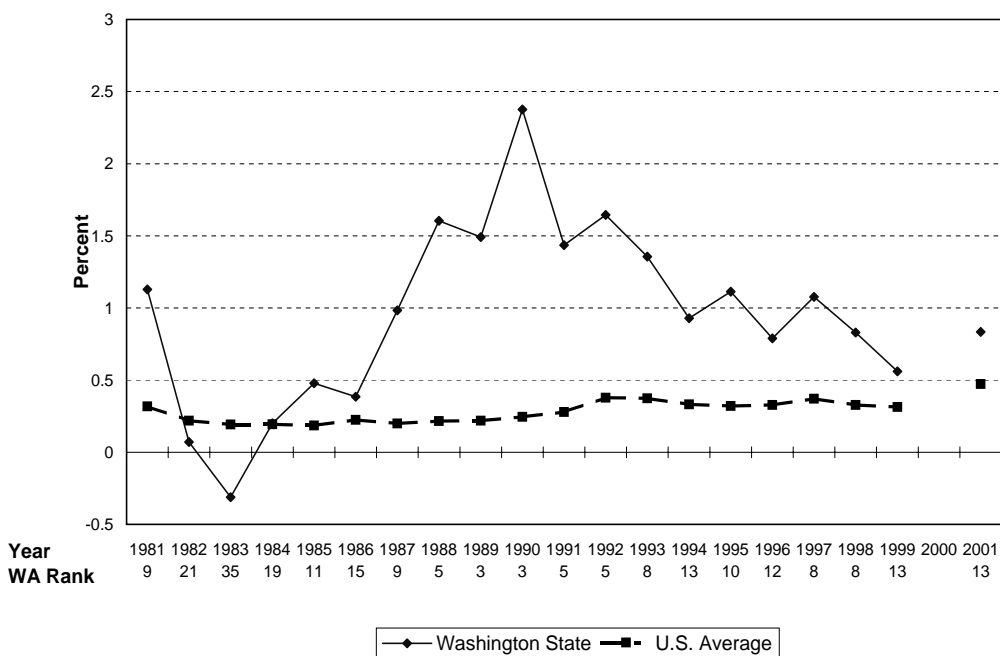


Table 8  
Economic Performance  
**Migration Rate**  
(Percent)\*

	1995	1996	1997	1998	1999	April 2000- July 2001
Alabama	0.3	0.3	0.3	0.3	0.0	-0.1
Alaska	-1.2	-0.6	-0.6	-0.1	-0.5	-0.2
Arizona	3.0	2.0	1.8	1.6	1.5	2.4
Arkansas	0.8	0.6	0.4	0.2	0.1	0.2
California	-0.5	-0.1	0.4	0.5	0.5	0.8
Colorado	1.5	1.2	1.3	1.2	1.4	1.6
Connecticut	-0.6	-0.4	-0.4	-0.3	-0.1	0.1
Delaware	0.8	0.7	0.6	0.7	0.7	0.9
Florida	1.3	1.5	1.5	1.3	1.1	2.3
Georgia	1.2	1.3	1.3	1.2	1.2	1.3
Hawaii	-0.4	-0.6	-0.4	-0.7	-1.3	-0.0
Idaho	1.8	1.1	1.1	0.9	0.9	1.1
Illinois	-0.0	-0.1	-0.2	-0.2	-0.2	-0.3
Indiana	0.3	0.2	0.1	0.1	0.1	-0.1
Iowa	0.1	-0.0	-0.1	-0.1	-0.0	-0.5
Kansas	0.1	-0.0	0.2	0.3	0.0	-0.4
Kentucky	0.4	0.3	0.3	0.3	0.3	0.1
Louisiana	-0.1	-0.3	-0.3	-0.4	-0.4	-0.9
Maine	-0.2	0.2	0.2	0.1	0.3	0.8
Maryland	0.1	0.1	0.1	0.2	0.2	0.7
Massachusetts	0.1	-0.0	0.1	0.1	0.1	-0.0
Michigan	0.2	0.3	-0.0	-0.1	-0.0	-0.1
Minnesota	0.3	0.4	0.3	0.3	0.5	0.4
Mississippi	0.4	0.2	0.3	0.2	0.1	-0.3
Missouri	0.5	0.5	0.4	0.2	0.2	0.2
Montana	1.2	0.5	-0.1	-0.2	0.1	-0.1
Nebraska	0.3	0.3	0.0	-0.2	-0.2	-0.5
Nevada	3.9	3.8	4.1	3.2	2.9	4.5
New Hampshire	0.6	0.9	0.7	0.6	0.9	1.4
New Jersey	0.1	0.0	0.1	0.0	0.1	0.2
New Mexico	0.9	0.5	0.1	-0.2	-0.5	-0.4
New York	-0.6	-0.6	-0.5	-0.5	-0.4	-0.5
North Carolina	1.2	1.2	1.1	1.0	0.8	0.9
North Dakota	-0.1	-0.2	-0.6	-0.8	-1.0	-1.5
Ohio	-0.1	-0.1	-0.2	-0.2	-0.2	-0.3
Oklahoma	0.2	0.4	0.3	0.3	0.1	-0.2
Oregon	1.3	1.2	1.1	0.7	0.6	0.9
Pennsylvania	-0.2	-0.2	-0.3	-0.3	-0.2	-0.1
Rhode Island	-0.8	-0.5	-0.4	-0.2	0.0	0.7
South Carolina	0.4	0.6	0.9	0.8	0.7	0.6
South Dakota	0.2	-0.2	-0.5	-0.4	-0.1	-0.3
Tennessee	1.1	1.0	0.8	0.6	0.5	0.4
Texas	0.8	0.8	0.8	0.8	0.7	1.0
Utah	0.9	0.8	0.6	0.1	-0.2	-0.2
Vermont	0.3	0.3	0.1	0.1	0.2	0.5
Virginia	0.4	0.4	0.4	0.3	0.6	0.8
<b>Washington</b>	<b>1.1</b>	<b>0.8</b>	<b>1.1</b>	<b>0.8</b>	<b>0.6</b>	<b>0.8</b>
West Virginia	0.0	-0.1	-0.2	-0.2	-0.3	-0.3
Wisconsin	0.4	0.3	0.1	0.0	0.1	0.2
Wyoming	0.2	-0.2	-0.6	-0.5	-0.6	-0.4
U.S. Average*	0.3	0.3	0.4	0.3	0.3	0.5
<b>Washington's Rank</b>	<b>10</b>	<b>12</b>	<b>8</b>	<b>8</b>	<b>13</b>	<b>13</b>

\* The District of Columbia is included in the U.S. average.  
Source: U.S. Department of Commerce, Bureau of the Census. December 2001.

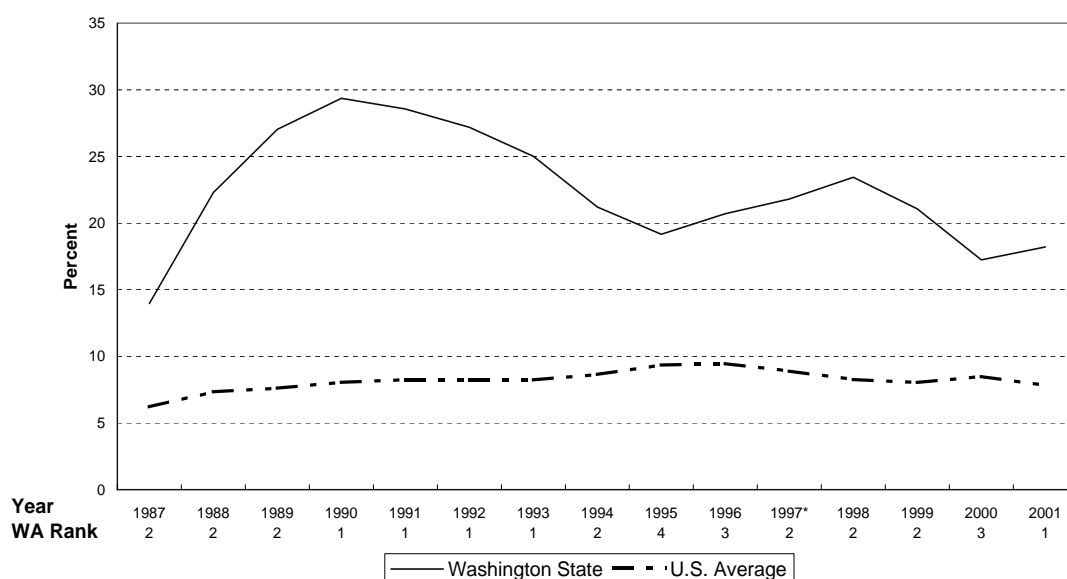
# Foreign Exports Inclusive and Exclusive of Transportation Equipment

In 2001, Washington ranked 1<sup>st</sup> among the states in foreign exports as a percent of personal income, with exports equivalent to 18.2 percent of total personal income. The state's average exports as a percent of personal income for the years 1997-2001 was 20.4 percent, ranking 2<sup>nd</sup> among the states and well above the national average of 8.3 percent.

Washington's perennially strong performance in this category is due mainly to the presence of Boeing and PACCAR, respectively the world's leading commercial aircraft and truck manufacturers. Exports of transportation equipment from these and other Washington manufacturers regularly account for over half of Washington's exports. Excluding exports of these products, Washington's exports were equivalent to 6.4 percent of personal income, roughly equal to the national average, ranking 13<sup>th</sup> among the states.

It must be noted that the trade data used for this indicator, obtained from the U.S. Bureau of the Census, only includes trade in goods, not services. Software, one of Washington's main exports, is classified as a service and is therefore not included in this data. As service exports are difficult to track and attribute to specific states, state service export data is not available from the Census. In its 2002 annual report, however, Microsoft, Washington's largest software producer, reported \$7.7 billion worth of foreign sales in its fiscal year ending June 2002. As Microsoft contributes greatly to state personal income while its exports are not included in the trade data, the measure of Washington exports as a percent of personal income understates the contribution of trade to Washington's economy. This growing understatement is part of the reason that exports excluding transportation products as a percentage of personal income, as shown in Chart 9, begins to decline in 1997, as this year coincides with the period where Microsoft's contribution to personal income began its greatest growth.

Chart 9  
Foreign Exports (Excluding Transportation Equipment)



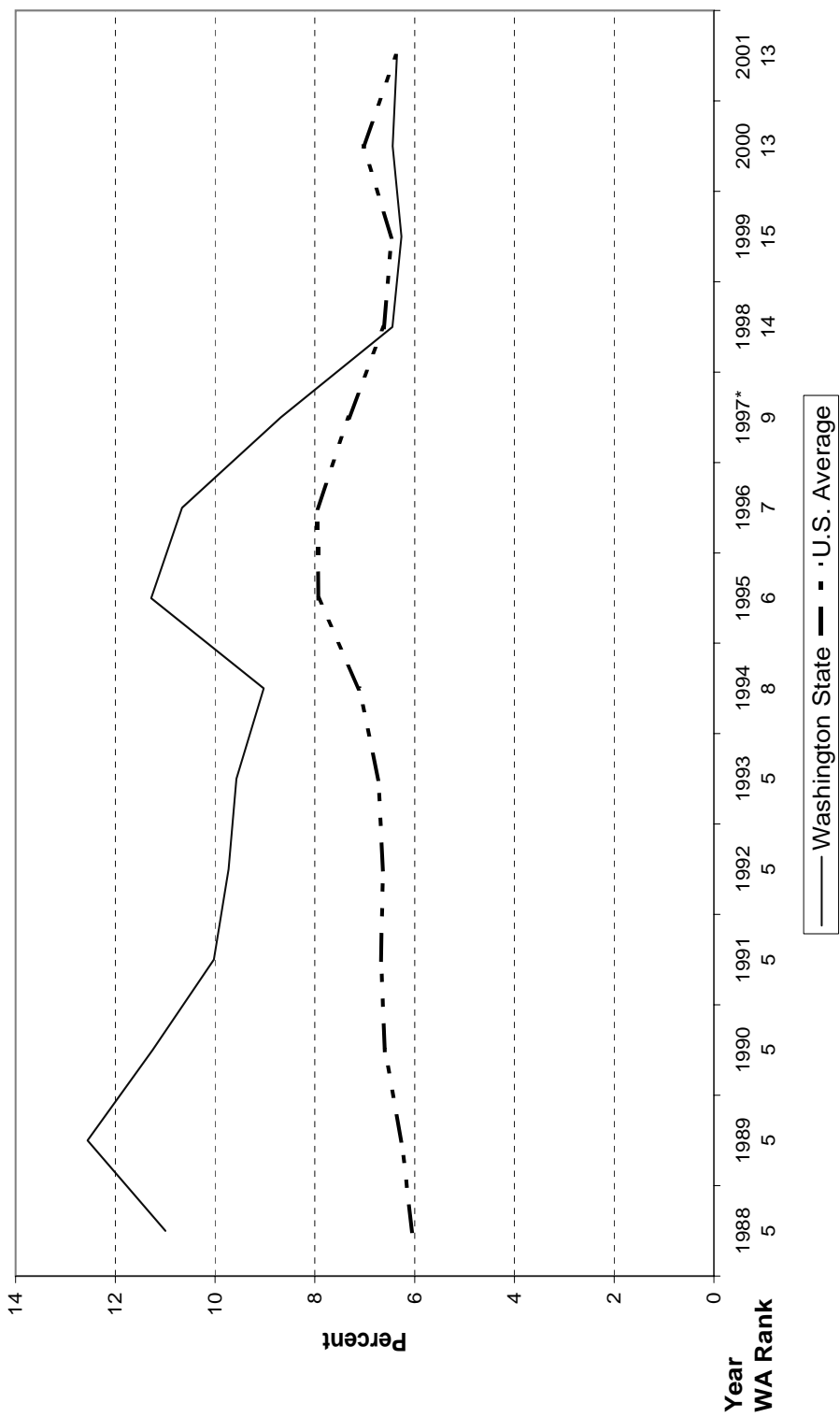
\*Trade data from 1997 to 2001 is coded under the North American Industry Classification System (NAICS).  
Prior data is coded under Standard Industrial Classification (SIC)

Table 9  
Economic Performance  
**Foreign Exports**  
(Percent of State Personal Income)

	1997	1998	1999	2000	2001	1997-2001
Alabama	6.50	6.60	6.16	6.92	6.90	6.61
Alaska	16.50	11.40	14.59	13.13	12.31	13.59
Arizona	13.33	10.11	9.83	10.94	9.11	10.67
Arkansas	4.51	4.25	3.89	4.39	4.72	4.35
California	11.51	10.28	9.84	10.88	9.46	10.40
Colorado	4.71	4.45	4.63	4.62	4.14	4.51
Connecticut	6.06	5.84	5.53	5.70	5.92	5.81
Delaware	10.26	10.20	10.05	8.87	7.68	9.41
Florida	6.15	6.04	5.69	5.85	5.73	5.89
Georgia	7.05	6.73	6.43	6.43	6.08	6.54
Hawaii	1.07	0.87	0.84	1.13	1.04	0.99
Idaho	6.59	5.58	7.58	11.36	6.52	7.53
Illinois	7.77	7.99	7.88	7.84	7.38	7.77
Indiana	8.63	8.25	8.33	9.28	8.46	8.59
Iowa	7.53	6.88	5.61	5.74	5.83	6.32
Kansas	6.73	5.95	6.67	6.94	6.50	6.56
Kentucky	9.59	9.19	9.75	9.80	8.93	9.45
Louisiana	20.30	17.28	15.99	16.19	15.14	16.98
Maine	6.20	6.19	6.57	5.42	5.27	5.93
Maryland	3.50	2.98	2.40	2.55	2.63	2.81
Massachusetts	8.63	7.74	7.75	8.50	7.05	7.93
Michigan	12.89	10.95	11.24	11.52	10.88	11.50
Minnesota	7.32	6.53	6.38	6.49	6.39	6.62
Mississippi	4.44	4.15	3.89	4.55	5.72	4.55
Missouri	5.13	4.15	4.21	4.22	3.88	4.32
Montana	2.99	2.22	2.20	2.61	2.25	2.46
Nebraska	4.84	4.61	4.63	5.28	5.46	4.96
Nevada	2.28	1.32	1.93	2.47	2.26	2.05
New Hampshire	4.93	4.91	5.18	5.70	5.59	5.26
New Jersey	5.82	5.51	5.32	5.87	5.80	5.66
New Mexico	5.09	5.03	8.30	6.01	3.32	5.55
New York	6.86	6.33	6.02	6.44	6.16	6.36
North Carolina	9.13	8.16	7.40	8.21	7.46	8.07
North Dakota	5.84	5.10	4.71	3.91	4.91	4.89
Ohio	8.91	8.48	8.17	8.22	8.27	8.41
Oklahoma	3.90	3.73	3.85	3.70	3.07	3.65
Oregon	11.36	10.59	11.75	11.99	9.10	10.96
Pennsylvania	5.13	4.83	4.72	5.15	4.62	4.89
Rhode Island	4.14	3.98	3.88	3.86	3.96	3.97
South Carolina	9.27	8.94	7.84	8.77	9.85	8.93
South Dakota	3.18	2.55	2.69	3.48	2.95	2.97
Tennessee	7.36	7.12	6.99	7.71	7.31	7.30
Texas	16.25	15.41	15.42	17.69	15.59	16.07
Utah	7.41	6.37	6.41	6.12	6.39	6.54
Vermont	27.71	24.89	25.88	24.55	16.14	23.84
Virginia	7.08	6.48	5.60	5.26	4.99	5.88
<b>Washington</b>	<b>21.81</b>	<b>23.44</b>	<b>21.07</b>	<b>17.24</b>	<b>18.21</b>	<b>20.35</b>
West Virginia	6.47	5.73	5.05	5.62	5.44	5.66
Wisconsin	7.85	7.08	6.72	6.87	6.63	7.03
Wyoming	4.89	4.12	3.56	3.66	3.46	3.94
U.S. Average	8.91	8.27	8.05	8.49	7.83	8.31
<b>Washington's Rank</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>

Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division, Bureau of Economic Analysis Trade data, prepared by Massachusetts Institute for Social and Economic Research, May 2002.

Chart 10  
Foreign Exports (Excluding Transportation Equipment)



\*Trade data from 1997 to 2001 is coded under the North American Industry Classification System (NAICS).  
Prior data is coded under Standard Industrial Classification (SIC)

Table 10  
Economic Performance  
**Foreign Exports (Excluding Transportation Equipment)**  
(Percent of State Personal Income)

	1997	1998	1999	2000	2001	1997-2001
Alabama	6.08	5.26	4.67	5.43	5.16	5.32
Alaska	16.31	11.17	14.44	12.88	12.03	13.37
Arizona	11.82	8.62	8.28	9.22	7.28	9.05
Arkansas	3.90	3.73	3.52	4.01	4.12	3.85
California	10.40	9.18	8.96	10.14	8.72	9.48
Colorado	4.55	4.24	4.42	4.44	3.95	4.32
Connecticut	4.29	3.71	3.54	3.46	3.18	3.63
Delaware	8.70	7.57	8.53	7.52	6.74	7.81
Florida	5.45	5.23	5.00	5.09	4.96	5.14
Georgia	5.89	5.50	5.06	5.36	5.18	5.40
Hawaii	0.96	0.74	0.75	1.00	0.82	0.85
Idaho	6.52	5.50	7.46	11.25	6.46	7.44
Illinois	6.87	6.58	6.38	6.23	5.92	6.40
Indiana	5.84	5.43	5.50	6.20	5.80	5.75
Iowa	7.11	6.49	5.13	5.27	5.43	5.89
Kansas	4.08	3.67	3.75	4.51	4.35	4.07
Kentucky	5.88	6.05	5.88	6.19	5.93	5.99
Louisiana	19.89	16.79	15.49	15.94	14.88	16.60
Maine	5.90	5.87	6.17	5.24	5.04	5.65
Maryland	2.20	2.10	2.00	2.20	2.21	2.14
Massachusetts	8.28	7.43	7.43	8.23	6.87	7.65
Michigan	5.60	4.72	4.54	4.83	4.64	4.87
Minnesota	6.78	6.04	5.96	6.04	5.88	6.14
Mississippi	4.19	3.72	3.68	4.24	4.08	3.98
Missouri	2.93	2.97	3.07	3.16	2.75	2.98
Montana	2.95	2.18	2.14	2.57	2.21	2.41
Nebraska	4.48	4.19	4.23	4.84	4.94	4.54
Nevada	2.12	1.19	1.63	2.26	1.84	1.81
New Hampshire	4.72	4.76	5.04	5.56	5.45	5.11
New Jersey	5.24	4.94	4.78	5.33	5.32	5.12
New Mexico	4.94	4.89	8.16	5.91	3.24	5.43
New York	6.11	5.55	5.39	5.85	5.51	5.68
North Carolina	8.46	7.63	6.92	7.72	7.06	7.56
North Dakota	5.17	4.34	4.08	3.38	4.45	4.29
Ohio	5.75	5.39	5.25	5.39	5.11	5.38
Oklahoma	3.31	2.99	2.87	2.77	2.50	2.89
Oregon	10.74	9.76	10.48	11.09	8.47	10.11
Pennsylvania	4.59	4.26	4.29	4.72	4.21	4.41
Rhode Island	4.03	3.87	3.78	3.75	3.88	3.86
South Carolina	7.96	7.60	6.74	7.26	6.78	7.27
South Dakota	3.02	2.42	2.56	3.38	2.84	2.84
Tennessee	5.66	5.53	5.38	5.97	5.74	5.66
Texas	14.40	13.35	13.37	15.69	13.74	14.11
Utah	6.45	5.55	5.39	4.94	5.32	5.53
Vermont	27.33	24.53	25.43	23.93	15.45	23.33
Virginia	6.60	5.89	4.93	4.77	4.53	5.34
<b>Washington</b>	<b>8.68</b>	<b>6.45</b>	<b>6.27</b>	<b>6.44</b>	<b>6.36</b>	<b>6.84</b>
West Virginia	6.37	5.64	4.92	5.42	5.00	5.47
Wisconsin	6.87	6.22	5.84	6.02	5.93	6.18
Wyoming	4.87	4.11	3.50	3.65	3.44	3.91
U.S. Average	7.32	6.62	6.46	7.03	6.37	6.76
<b>Washington's Rank</b>	<b>9</b>	<b>14</b>	<b>15</b>	<b>13</b>	<b>13</b>	<b>13</b>

Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division, Bureau of Economic Analysis  
Trade data prepared by Massachusetts Institute for Social and Economic Research, May 2002.

# Per Capita Spending in Research and Development

## Industrial, University, and Total Per Capita Research & Development

The amount of research and development activity occurring within a state relative to the size of its population provides a good indication of that state's capacity for innovation. Industrial research and development brings new products and processes for continued growth. University and government research and development can provide basic research to support local technology hubs and can also attract funding from outside of the state.

The Division of Science Resources Studies (SRS) of the National Science Foundation annually compiles surveys of industries, universities, and other agencies into a report titled *National Patterns of Research and Development Resources*. This report indicates the state in which the research and development activity took place regardless of the state of the sponsoring party. The state spending figures for industrial, university, and total research and development spending can be divided by the state populations to derive per capita spending. The most recent year of state spending data available is 1998.

In 1998, Washington ranked 24<sup>th</sup> in per capita university research and development with a spending level of \$94 per capita, slightly below the U.S. average of \$99. For the period 1991-98 its average rank was higher at 19<sup>th</sup>. In both industry and total 1998 per capita research and development spending, however, the state ranked much higher. Washington's 1998 per capita industrial research and development spending, at \$1314, was over twice as high as the national average of \$620, ranking 4<sup>th</sup> among the states. The state's total 1998 per capita research and development spending, at \$1488 was also much higher than the national average of \$841, ranking 6<sup>th</sup>.

Chart 11  
Per Capita Research and Development

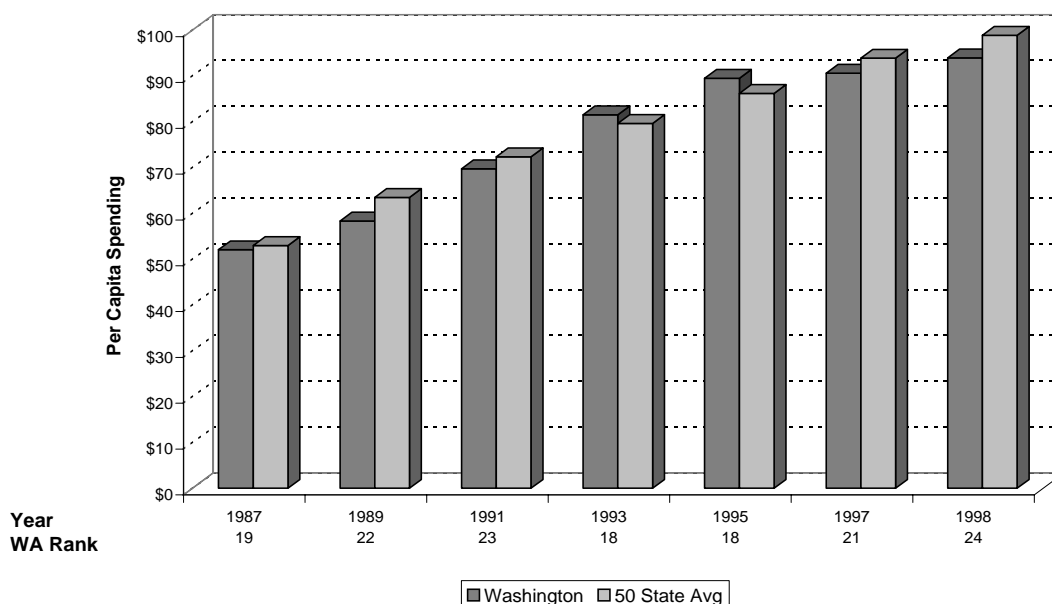


Table 11  
**University Research and Development**  
(Dollars Per Capita)

	1991	1993	1995	1997	1998	1991-98
Alabama	62	67	79	85	102	79
Alaska	118	112	120	117	123	118
Arizona	76	78	88	83	87	82
Arkansas	23	31	35	40	46	35
California	71	76	82	92	102	85
Colorado	77	93	105	110	123	102
Connecticut	98	111	116	120	123	114
Delaware	66	75	74	89	98	80
Florida	33	36	39	46	48	40
Georgia	73	79	91	102	105	90
Hawaii	69	64	66	101	124	85
Idaho	40	44	50	53	59	49
Illinois	60	65	69	77	87	72
Indiana	47	53	65	68	72	61
Iowa	93	106	114	120	125	111
Kansas	50	60	70	76	81	67
Kentucky	26	32	35	40	53	37
Louisiana	56	60	73	76	81	69
Maine	22	20	26	27	28	25
Maryland	216	228	231	244	259	236
Massachusetts	159	184	189	207	219	192
Michigan	64	73	78	86	89	78
Minnesota	75	73	73	77	77	75
Mississippi	39	40	42	46	55	44
Missouri	59	66	75	86	89	75
Montana	47	57	77	80	82	69
Nebraska	78	84	96	106	112	95
Nevada	52	57	57	53	48	53
New Hampshire	71	89	81	92	99	86
New Jersey	45	47	56	57	60	53
New Mexico	110	116	137	127	132	124
New York	79	85	94	98	106	92
North Carolina	74	87	96	106	119	96
North Dakota	77	85	93	88	89	86
Ohio	46	54	58	68	72	59
Oklahoma	48	54	57	49	63	54
Oregon	61	74	82	90	94	80
Pennsylvania	74	85	95	103	112	94
Rhode Island	88	103	107	113	113	105
South Carolina	42	49	59	58	64	55
South Dakota	23	31	29	34	34	30
Tennessee	49	55	59	61	64	58
Texas	70	77	79	82	86	79
Utah	114	104	102	113	119	110
Vermont	82	87	93	101	98	92
Virginia	55	62	68	68	72	65
<b>Washington</b>	<b>70</b>	<b>82</b>	<b>89</b>	<b>91</b>	<b>94</b>	<b>85</b>
West Virginia	28	30	29	35	35	32
Wisconsin	78	88	92	96	103	91
Wyoming	50	69	85	99	101	81
US Average	72	80	86	94	99	86
<b>Washington Rank</b>	<b>23</b>	<b>18</b>	<b>18</b>	<b>21</b>	<b>24</b>	<b>19</b>

Source: The National Science Foundation ([www.nsf.gov](http://www.nsf.gov))



Chart 12  
Industry Research and Development

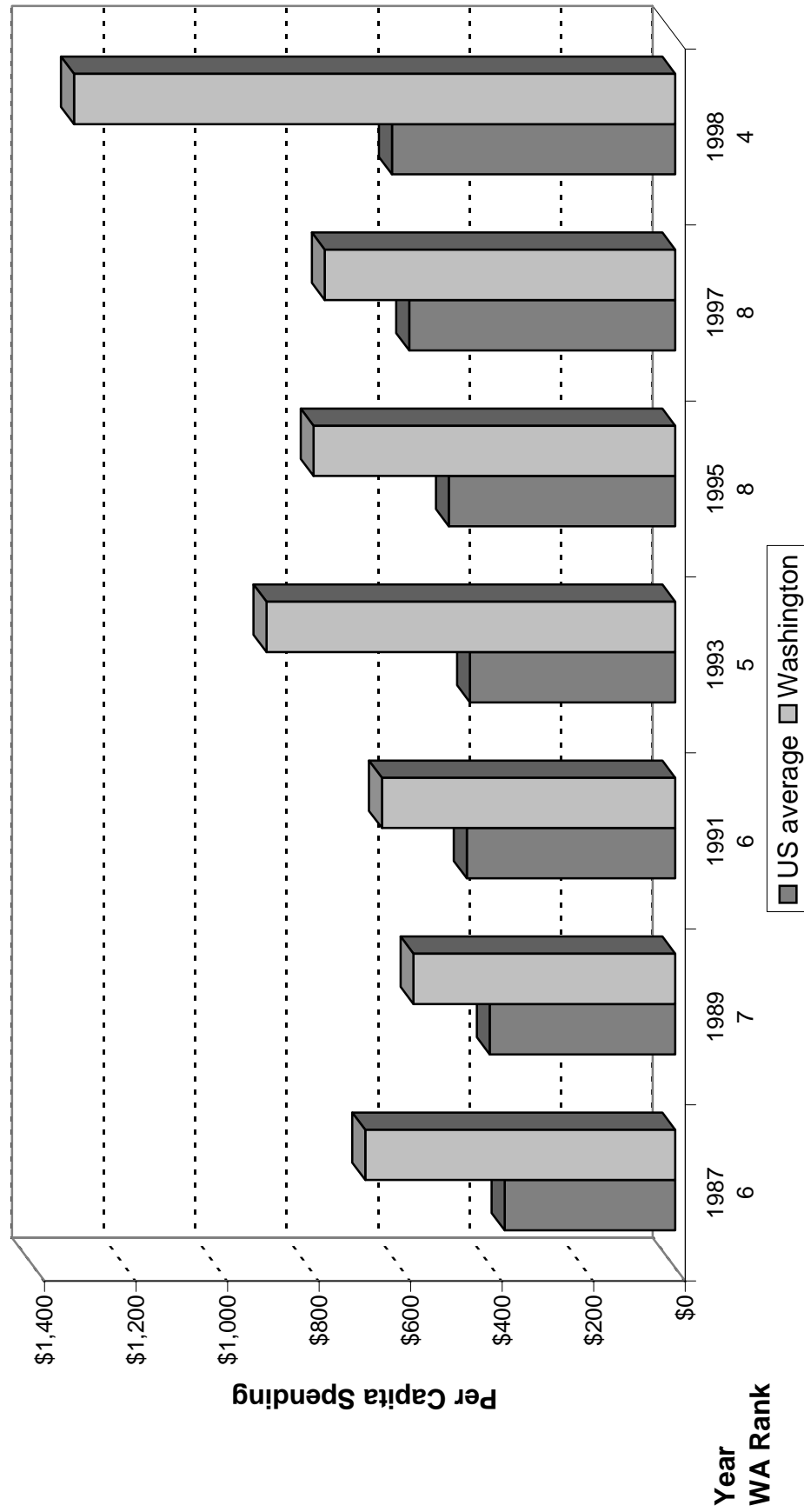


Table 12  
**Industry Research and Development**  
(Dollars Per Capita)

	1991	1993	1995	1997	1998	1991-98
Alabama	127	199	161	159	162	162
Alaska	32	23	50	49	D	39
Arizona	251	261	315	298	370	299
Arkansas	45	76	73	72	46	62
California	700	852	912	891	1,088	889
Colorado	D	593	499	479	898	617
Connecticut	467	725	1,196	1,195	951	907
Delaware	D	1,688	1,499	1,465	3,328	1,995
Florida	196	177	289	279	221	232
Georgia	131	125	163	157	189	153
Hawaii	10	220	12	12	14	53
Idaho	D	355	710	683	835	646
Illinois	436	447	486	481	571	484
Indiana	355	382	470	463	444	423
Iowa	165	189	351	350	222	255
Kansas	D	115	220	217	485	259
Kentucky	41	76	117	116	109	92
Louisiana	41	40	14	14	23	26
Maine	D	48	231	230	66	144
Maryland	248	420	214	211	340	287
Massachusetts	1,056	1,157	1,223	1,213	1,726	1,275
Michigan	864	1,041	1,282	1,266	1,288	1,148
Minnesota	409	544	572	562	703	558
Mississippi	16	20	25	24	27	22
Missouri	D	263	381	375	241	315
Montana	D	17	20	19	93	37
Nebraska	37	79	92	91	56	71
Nevada	65	49	211	192	249	153
New Hampshire	D	221	412	402	1,001	509
New Jersey	1,003	1,036	1,029	1,018	1,287	1,075
New Mexico	688	596	868	848	695	739
New York	459	486	477	477	615	503
North Carolina	190	278	310	300	446	305
North Dakota	D	14	19	19	53	26
Ohio	432	465	359	357	475	417
Oklahoma	124	96	88	87	73	94
Oregon	120	155	236	228	455	239
Pennsylvania	524	558	443	444	590	512
Rhode Island	151	176	526	527	1,336	543
South Carolina	118	136	200	195	181	166
South Dakota	7	31	26	26	7	19
Tennessee	149	156	191	186	376	212
Texas	274	271	332	321	427	325
Utah	201	219	406	389	528	349
Vermont	D	495	426	421	190	383
Virginia	177	168	239	234	399	243
<b>Washington</b>	<b>641</b>	<b>894</b>	<b>791</b>	<b>766</b>	<b>1,314</b>	<b>881</b>
West Virginia	D	55	133	134	124	112
Wisconsin	230	266	332	328	367	305
Wyoming	4	32	52	52	4	29
U.S.	456	449	495	582	620	520
<b>Washington's Rank</b>	<b>6</b>	<b>5</b>	<b>8</b>	<b>8</b>	<b>4</b>	<b>7</b>

Source: The National Science Foundation(www.nsf.gov)

**Chart 13**  
**Per Capita Research and Development**

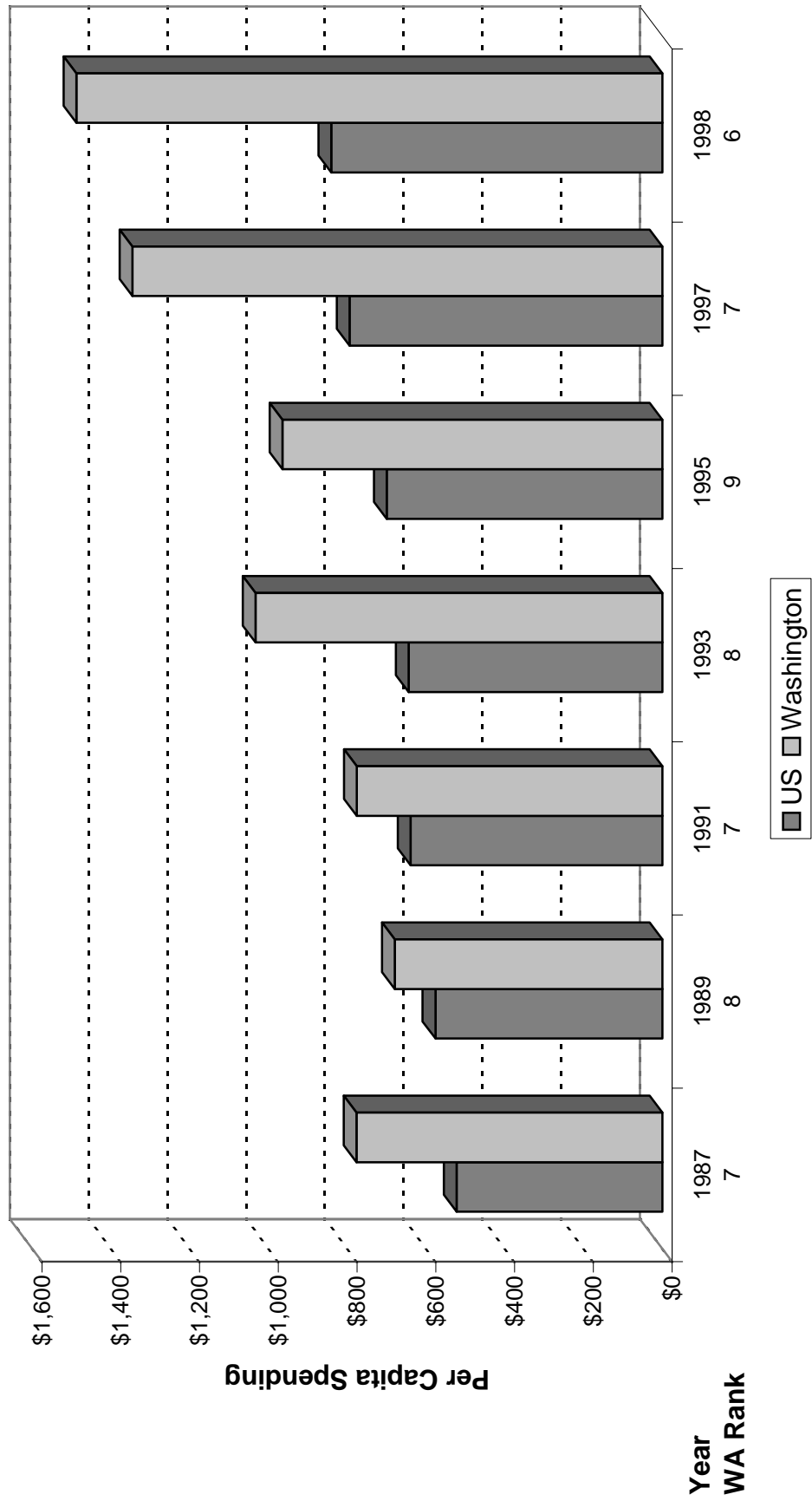


Table 13  
**Total Research and Development**  
(Dollars Per Capita)

	1991	1993	1995	1997	1998	1991-98
Alabama	369	469	394	379	443	411
Alaska	257	216	272	223	D	242
Arizona	372	403	454	529	497	451
Arkansas	84	124	133	108	112	112
California	932	1,083	1,144	1,293	1,344	1,159
Colorado	NA	804	722	824	1,150	875
Connecticut	583	858	1,320	1,057	1,087	981
Delaware	NA	1,785	1,599	1,481	3,435	2,075
Florida	278	257	368	326	320	310
Georgia	223	229	294	303	326	275
Hawaii	128	327	143	231	203	206
Idaho	NA	434	785	1,049	915	796
Illinois	556	578	630	669	732	633
Indiana	419	449	546	536	523	495
Iowa	278	320	490	343	368	360
Kansas	NA	182	295	516	575	392
Kentucky	85	113	154	135	164	130
Louisiana	107	110	98	127	124	113
Maine	NA	92	279	119	128	155
Maryland	1,181	1,524	1,367	1,452	1,563	1,417
Massachusetts	1,428	1,580	1,644	1,815	2,178	1,729
Michigan	942	1,131	1,374	1,430	1,391	1,254
Minnesota	503	646	670	769	808	679
Mississippi	117	123	117	135	133	125
Missouri	NA	342	469	338	344	373
Montana	NA	108	137	227	217	172
Nebraska	132	183	205	166	189	175
Nevada	203	158	292	308	327	258
New Hampshire	NA	391	522	681	1,130	681
New Jersey	1,128	1,166	1,146	1,498	1,404	1,268
New Mexico	1,674	1,704	1,959	1,757	1,749	1,768
New York	572	605	604	678	756	643
North Carolina	291	395	444	628	604	473
North Dakota	NA	144	152	181	187	166
Ohio	546	578	476	637	620	572
Oklahoma	191	165	162	194	154	173
Oregon	206	255	347	469	582	372
Pennsylvania	638	689	574	683	730	663
Rhode Island	483	485	906	1,054	1,698	925
South Carolina	167	196	269	274	258	233
South Dakota	46	82	75	98	82	76
Tennessee	231	238	266	291	461	297
Texas	383	387	449	490	547	451
Utah	375	400	579	669	712	547
Vermont	NA	597	529	533	297	489
Virginia	442	455	590	614	727	566
<b>Washington</b>	<b>776</b>	<b>1,033</b>	<b>965</b>	<b>1,346</b>	<b>1,488</b>	<b>1,122</b>
West Virginia	NA	154	261	235	232	221
Wisconsin	318	366	433	434	479	406
Wyoming	90	134	181	181	136	144
US	640	644	700	795	841	724
<b>Washington's rank</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>7</b>	<b>6</b>	<b>8</b>

Source: The National Science Foundation(www.nsf.gov)

# Unemployment Rate

In 2001, the national unemployment rate began to increase after reaching its lowest point in 31 years, increasing from an annual average of 4.0 percent to 4.5 percent. Washington's unemployment rate, having reached its lowest point in 33 years in 1999, increased in both 2000 and 2001, with its 2001 rate of 6.4 percent raking 50<sup>th</sup> among the states.

Historically, Washington has nearly always had an unemployment rate higher than the national average. Starting in the late 1980's, however, the gap between the two rates began to narrow, with Washington's rate sometimes below the national rate. This narrowing has been attributed to the decrease in the percent of Washington's workforce employed in seasonal industries such as agriculture, fishing, forest products, and food processing. It remains to be seen whether or not this trend will continue after the current period of increasing divergence.

Chart 14  
Unemployment Rate

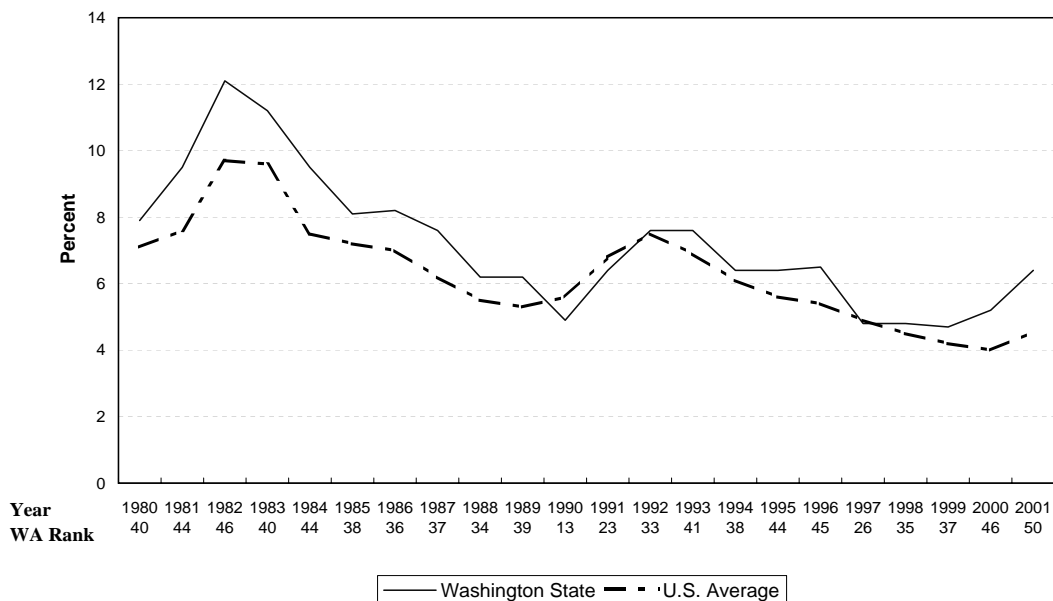


Table 14  
Economic Performance  
**Unemployment Rate**

	1997	1998	1999	2000	2001	1997-01
Alabama	5.1	4.2	4.8	4.6	5.3	4.8
Alaska	7.9	5.8	6.4	6.6	6.3	6.6
Arizona	4.6	4.1	4.4	3.9	4.7	4.3
Arkansas	5.3	5.5	4.5	4.4	5.1	5.0
California	6.3	5.9	5.2	4.9	5.3	5.5
Colorado	3.3	3.8	2.9	2.7	3.7	3.3
Connecticut	5.1	3.4	3.2	2.3	3.3	3.5
Delaware	4.0	3.8	3.5	4.0	3.5	3.8
Florida	4.8	4.3	3.9	3.6	4.8	4.3
Georgia	4.5	4.2	4.0	3.7	4.0	4.1
Hawaii	6.4	6.2	5.6	4.3	4.6	5.4
Idaho	5.3	5.0	5.2	4.9	5.0	5.1
Illinois	4.7	4.5	4.3	4.4	5.4	4.7
Indiana	3.5	3.1	3.0	3.2	4.4	3.4
Iowa	3.3	2.8	2.5	2.6	3.3	2.9
Kansas	3.8	3.8	3.0	3.7	4.3	3.7
Kentucky	5.4	4.6	4.5	4.1	5.5	4.8
Louisiana	6.1	5.7	5.1	5.5	6.0	5.7
Maine	5.4	4.4	4.1	3.5	4.0	4.3
Maryland	5.1	4.6	3.5	3.9	4.1	4.2
Massachusetts	4.0	3.3	3.2	2.6	3.7	3.4
Michigan	4.2	3.9	3.8	3.6	5.3	4.2
Minnesota	3.3	2.5	2.8	3.3	3.7	3.1
Mississippi	5.7	5.4	5.1	5.7	5.5	5.5
Missouri	4.2	4.2	3.4	3.5	4.7	4.0
Montana	5.4	5.6	5.2	4.9	4.6	5.1
Nebraska	2.6	2.7	2.9	3.0	3.1	2.9
Nevada	4.1	4.3	4.4	4.1	5.3	4.4
New Hampshire	3.1	2.9	2.7	2.8	3.5	3.0
New Jersey	5.1	4.6	4.6	3.8	4.2	4.5
New Mexico	6.2	6.2	5.6	4.9	4.8	5.5
New York	6.4	5.6	5.2	4.6	4.9	5.3
North Carolina	3.6	3.5	3.2	3.6	5.5	3.9
North Dakota	2.5	3.2	3.4	3.0	2.8	3.0
Ohio	4.6	4.3	4.3	4.1	4.3	4.3
Oklahoma	4.1	4.5	3.4	3.0	3.8	3.8
Oregon	5.8	5.6	5.7	4.9	6.3	5.7
Pennsylvania	5.2	4.6	4.4	4.2	4.7	4.6
Rhode Island	5.3	4.9	4.1	4.1	4.7	4.6
South Carolina	4.5	3.8	4.5	3.9	5.4	4.4
South Dakota	3.1	2.9	2.9	2.3	3.3	2.9
Tennessee	5.4	4.2	4.0	3.9	4.5	4.4
Texas	5.4	4.8	4.6	4.2	4.9	4.8
Utah	3.1	3.8	3.7	3.2	4.4	3.6
Vermont	4.0	3.4	3.0	2.9	3.6	3.4
Virginia	4.0	2.9	2.8	2.2	3.5	3.1
<b>Washington</b>	<b>4.8</b>	<b>4.8</b>	<b>4.7</b>	<b>5.2</b>	<b>6.4</b>	<b>5.2</b>
West Virginia	6.9	6.6	6.6	5.5	4.9	6.1
Wisconsin	3.7	3.4	3.0	3.5	4.6	3.6
Wyoming	5.1	4.8	4.9	3.9	3.9	4.5
U.S. Average	4.9	4.5	4.2	4.0	4.5	4.4
<b>Washington's Rank</b>	<b>26</b>	<b>35</b>	<b>37</b>	<b>46</b>	<b>50</b>	<b>41</b>

Source: U.S. Department of Labor, Bureau of Labor Statistics. July 2002 ([www.bls.gov](http://www.bls.gov))

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# **Quality of Life**



# Homicide Rate, Violent Crime Rate, Arrest Rate for Violent Crimes

Crime statistics can prove difficult to interpret because reporting procedures vary dramatically among states. Furthermore, nearly two-thirds of all crimes and three-fifths of violent crimes are never reported, creating a considerable discrepancy between actual and reported crime rates. In view of the fact that reporting methods differ across states, it is clear that state comparisons would be difficult and uncertain. However, recognizing the need for consistent national crime statistics, the International Association of Chiefs of Police established the Uniform Crime Records (UCR). The program's primary objective is to generate a reliable set of criminal statistics by mandating specific reporting requirements and criterion for gathering data that ensures consistency and comparability among states. The UCR program is a nationwide, statistical effort of over 17,000 city, county, and state law enforcement agencies. During 1999, the law enforcement agencies that voluntarily participated in the UCR program represented approximately 260 million United States inhabitants or 95 percent of the total population as established by the Bureau of the Census. Over the years its data have become one of the country's leading social indicators and is therefore used within this study. Specifically, the homicide rate, the violent crime rate (i.e. offenses of murder, forcible rape, robbery, and aggravated assault) and the arrest rate for violent crimes are included because of their seriousness and prevalence in media reporting.

In 2000, Washington's homicide rate, as measured per 100,000 people, increased from 3.0 (1999) to 3.3 (2000) and Washington's national rank thus declined from 15<sup>th</sup> to 20<sup>th</sup>. The violent crime rate, also measured per 100,000 people, declined from 377(1999) to 370(2000). Although Washington's violent crime rate of 370 is below the national average of 457, its national rank declined from 24<sup>th</sup> (1999) to 25<sup>th</sup> (2000). The Arrest Rate for Violent Crimes increased from 169 (1999) to 176 (2000), as measured per 100,000 people, and Washington's national rank decreased from 19<sup>th</sup> (1999) to 27<sup>th</sup> (2000). As in all years since UCR statistics began being reported, Washington continues to rank well below the national average in these categories of crime.

Chart 15  
Homicide Rate

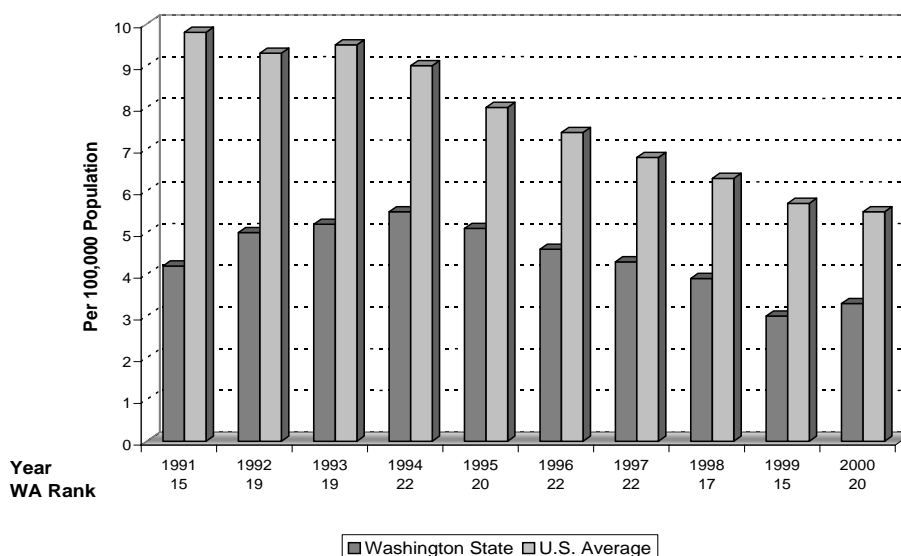


Table 15  
Quality of Life  
**Homicide Rate**  
(Per 100,000 Population)

	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>1996-00</b>
Alabama	10.4	9.9	8.1	7.9	7.4	8.7
Alaska	7.4	8.9	6.7	8.6	4.3	7.2
Arizona	8.5	8.2	8.1	8.0	7.0	8.0
Arkansas	8.7	9.9	7.9	5.6	6.3	7.7
California	9.1	8.0	6.6	6.0	6.1	7.2
Colorado	4.7	4.0	4.6	4.6	3.1	4.2
Connecticut	4.8	3.8	4.1	3.3	2.9	3.8
Delaware	4.3	2.5	2.8	3.2	3.2	3.2
Florida	7.5	6.9	6.5	5.7	5.6	6.4
Georgia	8.6	7.5	8.1	7.5	8.0	7.9
Hawaii	3.4	4.0	2.0	3.7	2.9	3.2
Idaho	3.6	3.2	2.9	2.0	1.2	2.6
Illinois	10.0	9.2	8.4	7.7	7.2	8.5
Indiana	7.2	7.3	7.7	6.6	5.8	6.9
Iowa	1.9	1.8	1.9	1.5	1.6	1.7
Kansas	6.6	6.0	5.9	6.0	6.3	6.2
Kentucky	5.9	5.8	4.6	0.0	4.8	4.2
Louisiana	17.5	15.7	12.8	10.7	12.5	13.8
Maine	2.0	2.0	2.0	2.2	1.2	1.9
Maryland	11.6	9.9	10.0	9.0	8.1	9.7
Massachusetts	2.6	1.9	2.0	2.0	2.0	2.1
Michigan	4.5	7.8	7.3	7.0	6.7	6.7
Minnesota	3.6	2.8	2.6	2.8	3.1	3.0
Mississippi	11.1	13.1	11.4	7.7	9.0	10.5
Missouri	8.1	7.9	7.3	6.6	6.2	7.2
Montana	3.9	4.8	4.1	2.6	1.8	3.4
Nebraska	2.9	3.0	3.1	3.6	3.7	3.3
Nevada	13.7	11.2	9.7	9.1	6.5	10.0
New Hampshire	1.7	1.4	1.5	1.5	1.8	1.6
New Jersey	4.2	4.2	4.0	3.5	3.4	3.9
New Mexico	11.5	7.7	10.9	9.8	7.4	9.5
New York	7.4	6.0	5.1	5.0	5.0	5.7
North Carolina	8.5	8.3	8.1	7.2	7.0	7.8
North Dakota	2.2	0.9	1.1	1.6	0.6	1.3
Ohio	4.8	4.7	4.0	3.5	3.7	4.1
Oklahoma	6.8	6.9	6.1	6.9	5.3	6.4
Oregon	4.0	2.9	3.8	2.7	2.0	3.1
Pennsylvania	5.7	5.9	5.3	4.9	4.9	5.3
Rhode	2.5	2.5	2.4	3.6	4.3	3.1
South Carolina	9.0	8.4	8.0	6.6	5.8	7.6
South Dakota	1.2	1.4	1.4	2.5	0.9	1.5
Tennessee	9.5	9.5	8.5	7.1	7.2	8.4
Texas	7.7	6.8	6.8	6.1	5.9	6.7
Utah	3.2	2.4	3.1	2.1	1.9	2.5
Vermont	1.9	1.5	2.2	2.9	1.5	2.0
Virginia	7.5	7.2	6.2	5.7	5.7	6.5
<b>Washington</b>	<b>4.6</b>	<b>4.3</b>	<b>3.9</b>	<b>3.0</b>	<b>3.3</b>	<b>3.8</b>
West Virginia	3.8	4.1	4.3	4.4	2.5	3.8
Wisconsin	4.0	4.0	3.6	3.4	3.2	3.6
Wyoming	3.3	3.5	4.8	2.3	2.4	3.3
U.S. Average	7.4	6.8	6.3	5.7	5.5	6.3
<b>Washington's Rank</b>	<b>22</b>	<b>22</b>	<b>17</b>	<b>15</b>	<b>20</b>	<b>20</b>

Source: U.S. Department of Justice. Federal Bureau of Investigation. Crime in the United States-Uniform Crime Reports: 1991-2000. (www.fbi.gov)  
NA: Complete arrest data were not available.

Chart 16  
Violent Crime Rate

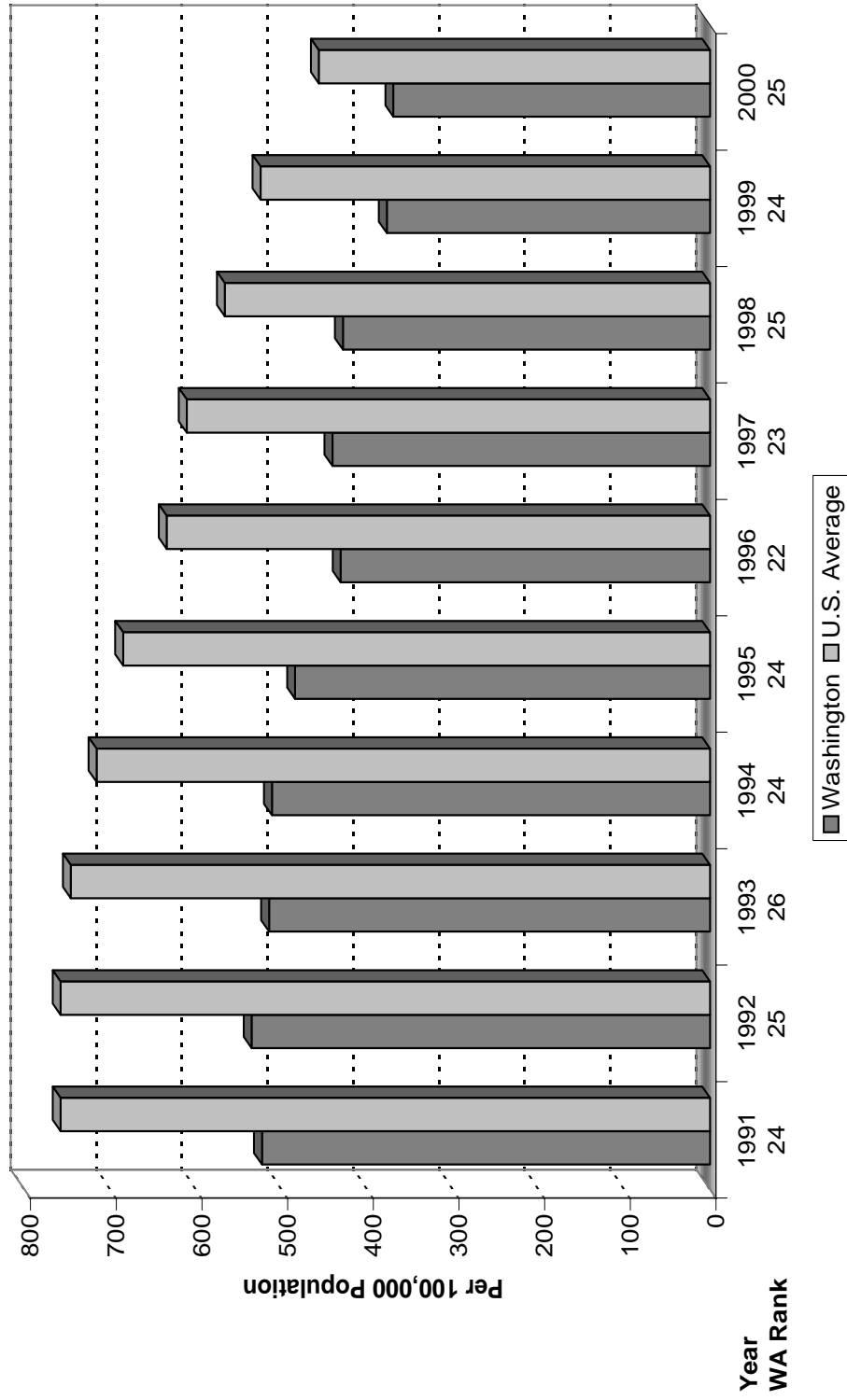


Table 16  
Quality of Life  
**Violent Crime Rate**  
(Per 100,000 Population)

	1996	1997	1998	1999	2000	1996-00
Alabama	565	565	512	490	486	524
Alaska	728	701	654	632	567	656
Arizona	632	624	578	551	532	583
Arkansas	524	527	490	425	445	482
California	863	798	704	627	622	723
Colorado	405	363	378	341	334	364
Connecticut	412	391	366	346	325	368
Delaware	668	678	762	734	684	705
Florida	1,051	1,024	939	854	812	936
Georgia	639	607	573	534	505	571
Hawaii	281	278	247	235	244	257
Idaho	267	257	282	245	253	261
Illinois	886	861	808	733	657	789
Indiana	537	515	431	375	349	441
Iowa	273	310	312	280	266	288
Kansas	414	409	397	383	389	398
Kentucky	321	317	284	301	295	303
Louisiana	929	856	780	733	681	796
Maine	125	121	126	112	110	119
Maryland	931	847	797	743	787	821
Massachusetts	642	644	621	551	476	587
Michigan	635	590	621	575	555	595
Minnesota	339	338	310	274	281	308
Mississippi	488	469	411	349	361	416
Missouri	591	577	556	500	490	543
Montana	161	132	139	207	241	176
Nebraska	435	438	451	430	328	416
Nevada	811	799	644	570	524	670
New Hampshire	118	113	107	97	175	122
New Jersey	532	493	440	412	384	452
New Mexico	841	853	961	835	758	850
New York	727	689	638	589	554	639
North Carolina	588	607	579	542	498	563
North Dakota	84	87	89	67	81	82
Ohio	429	435	363	316	334	375
Oklahoma	597	560	539	508	498	540
Oregon	463	444	420	375	351	411
Pennsylvania	463	442	421	421	420	433
Rhode Island	347	334	312	287	298	315
South Carolina	997	990	903	847	805	908
South Dakota	177	197	154	167	167	173
Tennessee	774	790	715	695	707	736
Texas	644	603	565	560	545	583
Utah	332	334	314	276	256	302
Vermont	121	120	106	114	114	115
Virginia	341	345	326	315	282	322
<b>Washington</b>	<b>431</b>	<b>441</b>	<b>429</b>	<b>377</b>	<b>370</b>	<b>409</b>
West Virginia	210	219	249	351	317	269
Wisconsin	253	271	249	246	237	251
Wyoming	250	255	248	232	267	250
United States	634	611	566	525	457	559
<b>Washington's Rank</b>	<b>22</b>	<b>23</b>	<b>25</b>	<b>24</b>	<b>25</b>	<b>22</b>

Source: U.S. Department of Justice. Federal Bureau of Investigation. Crime in the United States-Uniform Crime Reports: 1991-2000. ([www.fbi.gov](http://www.fbi.gov))

Chart 17  
Arrests Rates for Violent Crime

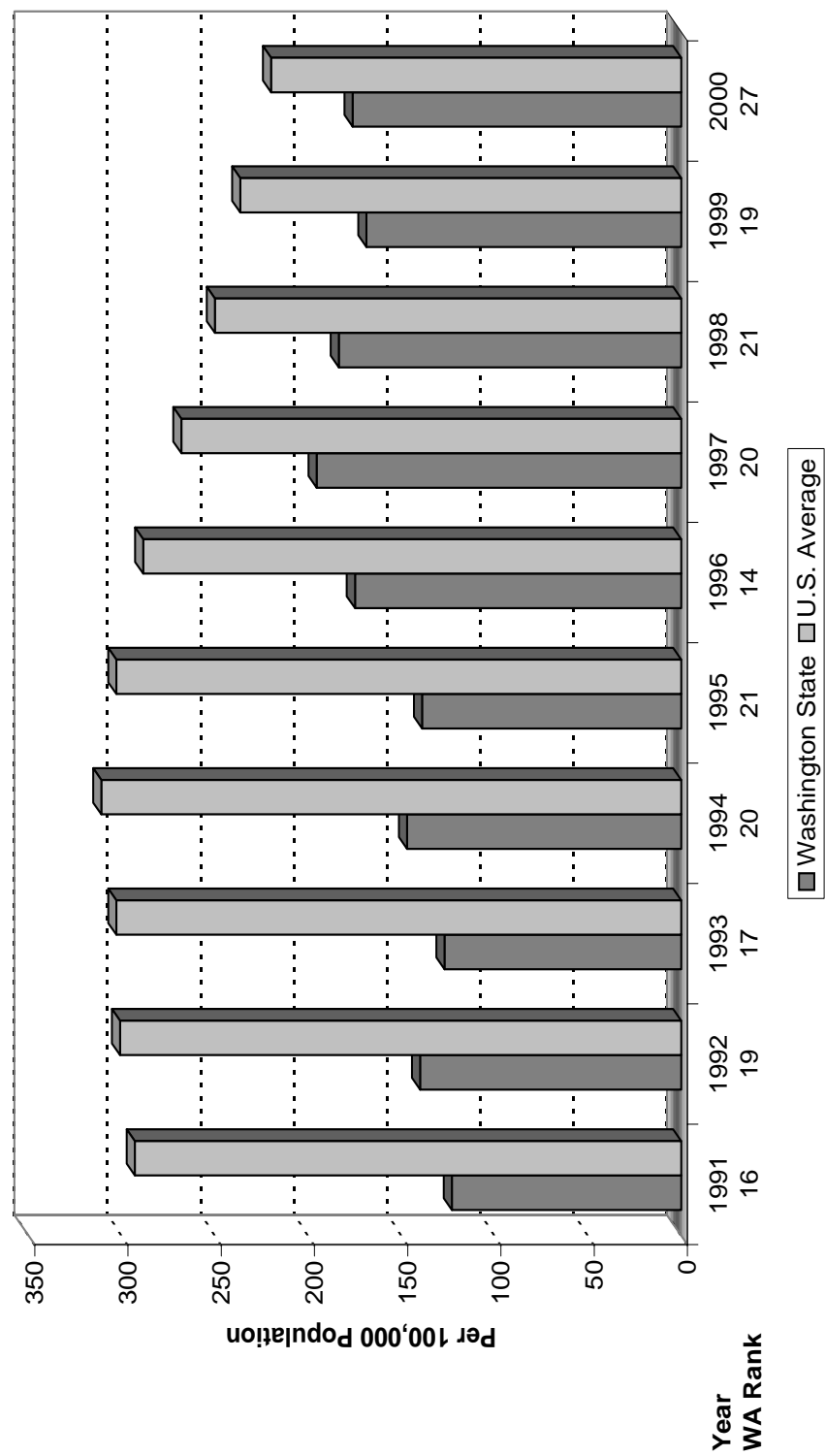


Table 17  
Quality of Life  
**Arrest Rates for Violent Crime**  
(Per 100,000 Population)

	1996	1997	1998	1999	2000	1996-00
Alabama	266	249	196	165	184	212
Alaska	283	382	262	259	211	279
Arizona	216	224	201	177	176	199
Arkansas	222	264	229	225	215	231
California	468	473	434	403	383	432
Colorado	184	181	174	205	159	181
Connecticut	252	269	247	166	176	222
Delaware	482	515	345	384	583	462
Florida	NA	NA	390	368	344	368
Georgia	218	452	343	173	291	295
Hawaii	126	134	112	107	120	120
Idaho	117	110	129	107	107	114
Illinois	461	407	383	402	360	402
Indiana	252	257	264	268	260	260
Iowa	135	161	153	181	160	158
Kansas	NA	NA	NA	NA	NA	NA
Kentucky	548	481	451	558	161	440
Louisiana	374	429	376	353	334	373
Maine	73	65	71	NA	71	70
Maryland	316	268	250	156	228	244
Massachusetts	283	304	327	284	281	296
Michigan	261	245	220	213	110	210
Minnesota	152	88	122	139	140	128
Mississippi	220	229	209	189	179	205
Missouri	319	315	332	263	266	299
Montana	NA	59	70	140	201	117
Nebraska	67	95	106	91	93	90
Nevada	230	220	222	180	163	203
New Hampshire	61	NA	74	60	57	63
New Jersey	262	247	227	203	190	226
New Mexico	217	243	266	254	243	245
New York	432	172	188	178	175	229
North Carolina	375	385	380	357	322	364
North Dakota	39	34	36	35	26	34
Ohio	271	246	208	178	175	216
Oklahoma	198	183	182	NA	173	184
Oregon	157	136	130	109	119	130
Pennsylvania	212	143	226	244	257	216
Rhode Island	257	230	151	121	105	173
South Carolina	326	344	310	334	271	317
South Dakota	136	148	108	99	96	117
Tennessee	391	382	311	258	208	310
Texas	204	182	166	161	153	173
Utah	122	119	117	117	98	115
Vermont	NA	NA	30	60	58	49
Virginia	185	171	168	159	121	161
Washington	<b>175</b>	<b>196</b>	<b>184</b>	<b>169</b>	<b>176</b>	<b>180</b>
West Virginia	76	78	94	174	148	114
Wisconsin	182	204	NA	NA	NA	193
Wyoming	146	141	123	107	131	130
U. S. Average	289	268	250	236	220	253
<b>Washington's Rank</b>	<b>14</b>	<b>20</b>	<b>21</b>	<b>19</b>	<b>27</b>	<b>19</b>

\* Violent crimes are offenses of murder, forcible rape, robbery, and aggravated assault.

NA: Complete arrest data were not available.

Source: U.S. Department of Justice. Federal Bureau of Investigation. Crime in the United States-Uniform Crime Reports: 1991-2000 ([www.fbi.gov](http://www.fbi.gov))

# Air Quality Index

(Not updated due to unavailability of data)

The air quality index measures the percentage of a state's population living in nonattainment areas. The Environmental Protection Agency (EPA) defines a nonattainment area as a locality where air pollution levels have exceeded the allowable amount according to National Ambient Air Quality Standards (NAAQS). Once an area gains "nonattainment" status, its air must meet the NAAQS standards for three years before it can be reclassified as an "attainment" area. Carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide are the six "criteria pollutants" tested under the NAAQS. Adverse effects on the environment and human health may result from pollutant concentrations exceeding these NAAQS thresholds.

In 1996, 54.5 percent of Washington's population lived in non-attainment areas, ranking Washington 39<sup>th</sup> among the states. In 1997, improved air quality in the Seattle-Tacoma area resulted in a substantial decline in the percentage of state residents living in non-attainment areas. Washington improved its ranking from 39<sup>th</sup> to 26<sup>th</sup>, with a reduction of 61.7% of Washington residents living in nonattainment areas. Washington has improved every year since 1997 and in 2000 realized a record low with only 6.4 percent of state residents living in nonattainment areas, ranking Washington 22<sup>nd</sup> among the states. This progress can be attributed to improvements made in Kent, Tacoma and Seattle that resulted in a redesignation from nonattainment to attainment for 870,119 people.

Chart 18  
Air Quality Index

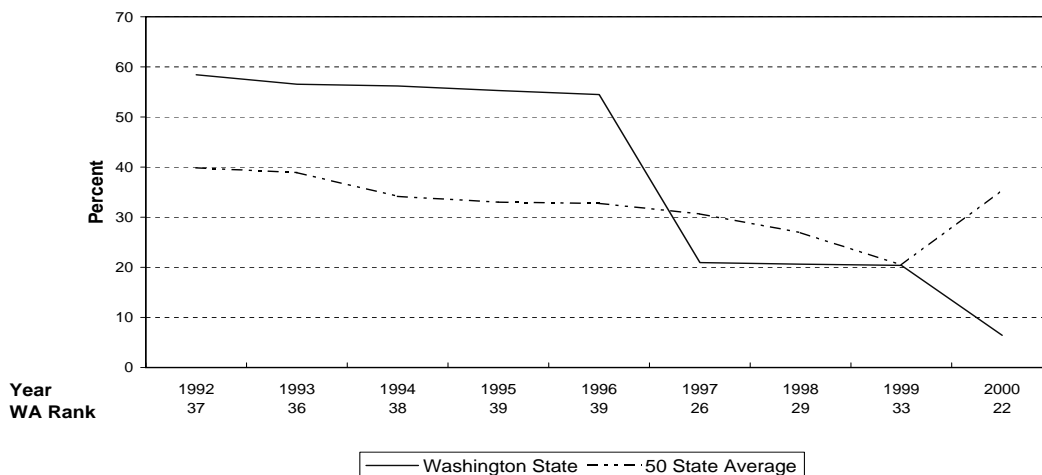


Table 18  
Quality of Life  
**Air Quality Index**  
(Percent of State Population)

	1996	1997	1998	1999	2000	1996-00
Alabama	17.5	17.4	17.3	17.2	16.9	17.2
Alaska	43.6	43.4	42.9	42.6	42.1	42.9
Arizona	50.7	49.3	48.1	47.0	43.7	47.8
Arkansas	0.0	0.0	0.0	0.0	0.0	0.0
California	82.3	79.2	83.4	82.2	80.5	81.5
Colorado	62.5	61.2	60.0	48.7	45.6	55.6
Connecticut*	75.6	75.6	75.5	75.3	72.5	74.9
Delaware*	15.5	15.4	0.0	0.0	14.4	9.1
Florida	0.0	0.0	0.0	0.0	0.0	0.0
Georgia	38.6	37.8	37.1	34.1	32.4	36.0
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0
Idaho	17.9	17.6	19.4	9.1	19.2	16.7
Illinois*	66.0	65.7	65.3	65.0	63.5	65.1
Indiana*	11.5	3.4	0.3	0.3	0.0	3.1
Iowa	0.8	0.8	0.0	0.0	0.0	0.3
Kansas	0.0	0.0	0.0	0.0	0.0	0.0
Kentucky*	23.6	23.4	22.5	22.3	21.9	22.8
Louisiana	17.3	12.8	12.8	12.8	12.5	13.6
Maine	65.8	59.2	35.3	0.0	57.2	43.5
Maryland*	47.5	47.1	46.8	46.4	45.3	46.6
Massachusetts*	103.7	103.2	102.8	13.1	99.5	84.5
Michigan	12.2	1.6	1.6	0.0	0.0	3.1
Minnesota	51.2	50.8	50.4	7.2	7.0	33.3
Mississippi	0.0	0.0	0.0	0.0	0.0	0.0
Missouri*	44.6	44.3	44.0	43.8	42.8	43.9
Montana	12.8	12.9	12.1	12.6	26.2	15.3
Nebraska	0.1	0.1	0.1	0.1	0.0	0.0
Nevada	62.5	59.6	57.2	55.1	51.0	57.1
New Hampshire*	34.9	34.5	15.4	0.0	32.8	23.5
New Jersey*	4.0	4.0	0.0	0.0	3.8	2.3
New Mexico	2.2	2.2	2.1	2.2	2.0	2.1
New York*	112.3	112.3	98.8	98.6	94.6	103.3
North Carolina	0.0	0.0	0.0	0.0	0.0	0.0
North Dakota	0.0	0.0	0.0	0.0	0.0	0.0
Ohio*	38.7	38.6	37.5	34.8	17.6	33.4
Oklahoma	0.0	0.0	0.0	0.0	0.0	0.0
Oregon*	45.2	37.6	8.3	8.2	11.1	22.1
Pennsylvania*	102.5	102.7	75.1	75.2	43.2	79.7
Rhode Island	101.5	101.6	101.5	0.0	95.7	80.1
South Carolina	0.0	0.0	0.0	0.0	0.0	0.0
South Dakota	0.0	0.0	0.0	0.0	0.0	0.0
Tennessee	33.0	17.7	16.7	15.1	0.0	16.5
Texas	43.4	42.6	41.8	41.1	39.5	41.7
Utah	62.7	61.4	51.3	50.6	48.2	54.8
Vermont	0.0	0.0	0.0	0.0	0.0	0.0
Virginia*	31.6	31.2	0.0	0.0	0.0	12.6
<b>Washington*</b>	<b>54.5</b>	<b>20.9</b>	<b>20.6</b>	<b>20.4</b>	<b>6.4</b>	<b>24.6</b>
West Virginia	2.1	2.1	2.1	2.1	2.1	2.1
Wisconsin	42.3	38.2	38.0	37.3	36.5	38.5
Wyoming	2.9	2.9	2.7	2.7	2.6	2.8
50 State Average	32.8	30.6	26.9	20.5	35.5	29.3
<b>Washington's Rank</b>	<b>39</b>	<b>26</b>	<b>29</b>	<b>33</b>	<b>22</b>	<b>30</b>

\*Due to areas that span more than one state, these states may have more or less non-attainment areas than specified but are not documented to avoid double counting.

Source: U.S. Environmental Protection Agency, National Air Quality and Emissions Trends Report, 1996-1999 data: effective July 25, 1996, June 18, 1997, December 7, 1998, December 13, 1999 from the Office of Air Quality Planning and Standards. The 2000 data was computed early with an effective date of August 9th, 2001.



# Drinking Water

The objective of the Washington State Department of Health Drinking Water Program is to protect the health of the citizens of Washington State by ensuring safe and reliable drinking water. In Washington, nearly 5 million residents are served by 4,260 public water systems that must abide by the standards established by the Environmental Protection Agency (EPA) under the federal Safe Drinking Water Act (SDWA). These standards are designed to prevent microbial, chemical and radiological contaminants in drinking water and to assure the protection of public health if contamination does occur. EPA tracks a variety of information related to water systems subject to the SDWA. The number of contaminants regulated by the EPA has risen from 23 in 1986 to 84 in 1996 and is expected to reach 103 by 2002 and 130 by 2010.

The EPA annually reports number of systems whose water has exceeded the Maximum Contaminant Level (MCL) for any contaminant and the number of people served by those systems. A MCL, according to the EPA, is the highest permissible level for a contaminant. In addition, the EPA also calculates the number of systems that have violated a treatment technique, the requirement to have properly operating treatment facilities in order to remove contaminants. The attached table contains EPA data for the years 1997-2001, showing the percentage of a state's population served by a water system subject to the SDWA that violated either a coliform MCL or a surface water treatment technique.

In 2001, 9.4 percent of Washington residents were served by water systems in violation of either a coliform MCL or a water treatment technique, compared to the 50 State average of 7.7 percent. Washington's rank dropped to 39<sup>th</sup> among the states, down from 24<sup>th</sup> in 2000. Though Washington ranked 29<sup>th</sup> in the percentage of its population served by a system with an MCL or treatment violation at some point in the period from 1997 to 2001, this percentage was below the 50-state average for the same period.

Chart 19  
Drinking Water

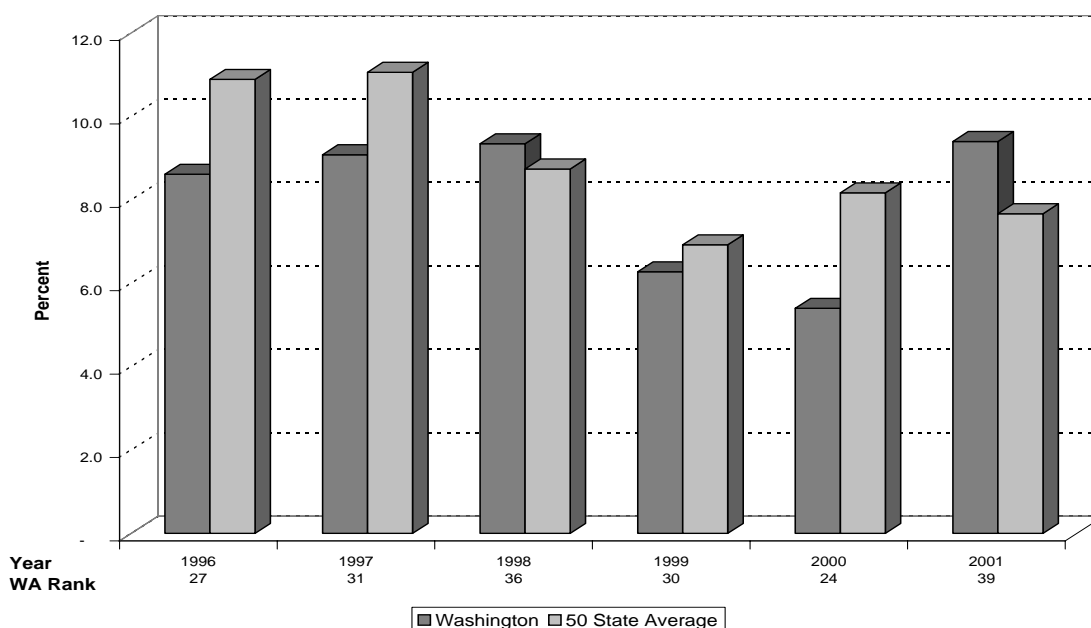


Table 19  
Quality of Life  
**Drinking Water Index**  
(Percent)\*

	1997	1998	1999	2000	2001	1997-01
Alabama	3.3	5.3	2.3	2.0	3.0	3.2
Alaska	41.1	30.6	9.7	14.0	9.0	20.9
Arizona	8.7	25.5	13.8	9.0	5.0	12.4
Arkansas	21.2	5.8	7.2	8.0	10.0	10.4
California	5.2	2.8	1.5	6.0	2.0	3.5
Colorado	9.2	10.2	10.0	10.0	10.0	9.9
Connecticut	15.2	15.7	13.9	2.0	2.0	9.8
Delaware	1.6	17.3	0.4	17.0	8.0	8.8
Florida	8.6	6.4	4.9	4.0	5.0	5.8
Georgia	3.1	3.3	5.8	1.0	2.0	3.0
Hawaii	6.5	6.2	6.3	5.0	9.0	6.6
Idaho	16.2	21.0	9.5	17.0	3.0	13.3
Illinois	7.9	8.1	12.2	9.0	8.0	9.0
Indiana	10.9	2.3	0.9	7.0	5.0	5.2
Iowa	5.8	3.4	5.2	5.0	2.0	4.3
Kansas	5.8	10.0	3.8	5.0	6.0	6.1
Kentucky	27.5	3.7	7.9	3.0	7.0	9.8
Louisiana	10.8	9.2	5.3	6.0	6.0	7.5
Maine	5.2	3.9	5.0	35.0	11.0	12.0
Maryland	2.2	2.3	2.0	1.0	0.0	1.5
Massachusetts	56.7	51.9	36.3	58.0	54.0	51.4
Michigan	1.6	0.9	0.9	2.0	2.0	1.5
Minnesota	0.4	0.5	1.6	1.0	1.0	0.9
Mississippi	5.9	3.8	5.7	9.0	9.0	6.7
Missouri	3.2	3.8	3.3	2.0	4.0	3.2
Montana	16.1	18.6	5.8	4.0	4.0	9.7
Nebraska	7.2	12.3	13.6	19.0	53.0	21.0
Nevada	1.0	0.2	1.9	1.0	0.0	0.8
New Hampshire	13.3	8.5	7.2	8.0	12.0	9.8
New Jersey	14.3	1.4	1.0	15.0	13.0	8.9
New Mexico	5.9	1.9	6.5	7.0	7.0	5.7
New York	47.1	43.3	41.8	12.0	12.0	31.2
North Carolina	1.6	1.3	2.4	3.0	4.0	2.5
North Dakota	24.8	0.8	1.4	4.0	4.0	7.0
Ohio	13.7	4.6	3.4	1.0	12.0	7.0
Oklahoma	19.2	14.5	12.6	6.0	7.0	11.9
Oregon	14.1	5.8	7.3	6.0	7.0	8.1
Pennsylvania	5.3	3.6	2.4	4.0	3.0	3.7
Rhode Island	3.1	1.2	4.9	6.0	0.0	3.1
South Carolina	11.7	12.0	11.8	23.0	13.0	14.3
South Dakota	6.9	7.2	2.0	2.0	2.0	4.0
Tennessee	1.6	3.2	2.9	3.0	3.0	2.7
Texas	2.8	2.5	2.8	2.0	3.0	2.6
Utah	3.5	2.4	3.7	6.0	1.0	3.3
Vermont	8.7	10.2	3.3	7.0	7.0	7.2
Virginia	1.5	2.3	2.6	2.0	2.0	2.1
Washington**	<b>9.1</b>	<b>9.3</b>	<b>6.3</b>	<b>5.4</b>	<b>9.4</b>	<b>7.9</b>
West Virginia	3.2	2.6	6.3	6.0	5.0	4.6
Wisconsin	9.0	9.2	6.6	15.0	15.0	11.0
Wyoming	24.6	4.3	10.0	3.0	2.0	8.8
50 State Average***	11.1	8.7	6.9	8.2	7.7	8.5
<b>Washington's Rank</b>	<b>31</b>	<b>36</b>	<b>30</b>	<b>24</b>	<b>39</b>	<b>29</b>

\*Percent of population served by water supply in violation of EPA standards.

\*\* Supplied by the Washington State Department of Health.

\*\*\*The 50 state average is an average of indicators listed. It may differ from the U.S. average.

Source: U.S. Environmental Protection Agency, Community Public Water Systems Compliance Statistics Safe Drinking Water Information System. FY 1996-2001.

(www.epa.gov), Washington State Department of Health. (www.doh.wa.gov)

# Toxins Released

The Toxics Release Inventory (TRI) provides the public with information concerning the amounts of toxic chemical releases from industrial facilities. Under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), the inventory was established with the objective of promoting emergency planning, minimizing the effects of chemical accidents, and providing the public with information on the release of toxic chemicals in their communities. The EPCRA/TRI Program requires that manufacturing facilities report nearly 650 toxic chemicals and chemical compounds to the Environmental Protection Agency\*.

In 2000, U.S. industries reported 2.3 billion pounds of toxic releases, down 73 million pounds from 1999. This figure includes toxic releases directly to air, water, and land, in addition to the disposal of toxic chemicals in on-site or off-site land fills, surface impoundments, land treatment, and underground injection wells. Washington industries reported 26.1 million pounds of toxic releases in 2000, ranking 21<sup>st</sup> among the states in terms of releases per square mile. While this was an 830,000-pound increase from 1999, it was well below the levels reported as recently as 1998, when 32.1 million pounds of releases were reported. Washington's toxic releases per square mile have been consistently lower than the U.S. average (total U.S. releases divided by total U.S. area) since the TRI reports began in 1989.

\* U.S. Environmental Protection Agency. *1999 Toxics Release Inventory*.

Chart 20  
Toxins Released

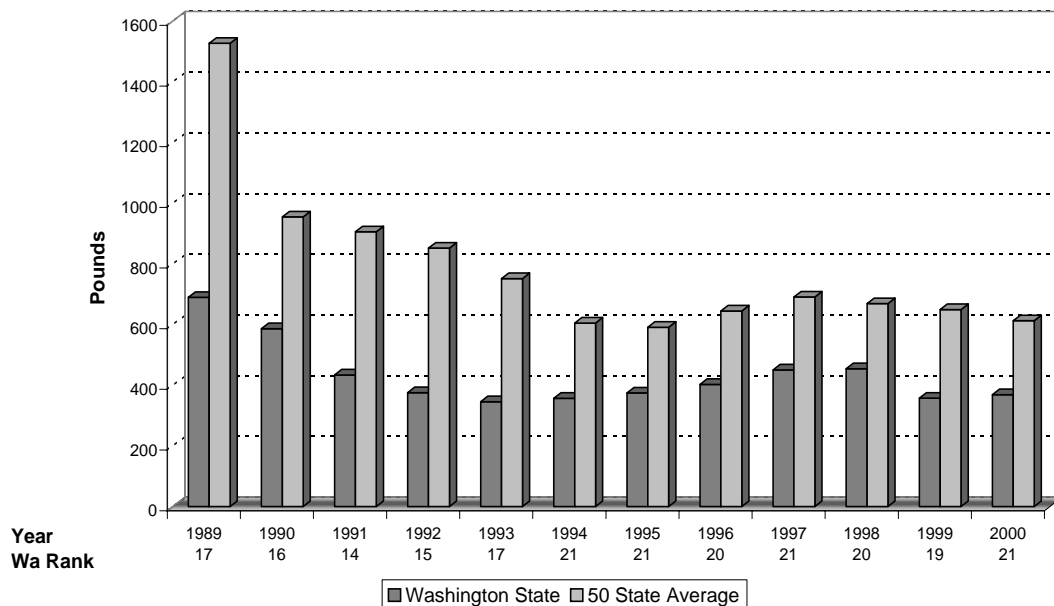


Table 20  
Quality of Life  
**Toxins Released**  
Pounds per square miles

	1996	1997	1998	1999	2000	1996-00
Alabama	1,970	1,812	1,714	1,508	1,480	1,697
Alaska	11	8	3	3	3	6
Arizona	421	276	477	446	345	393
Arkansas	640	1,123	954	975	894	917
California	315	284	268	283	252	280
Colorado	55	49	53	73	67	59
Connecticut	1,476	1,744	1,372	1,156	1,152	1,380
Delaware	1,527	1,463	2,296	3,218	3,438	2,388
Florida	1,350	1,591	1,309	1,290	1,237	1,355
Georgia	998	1,219	1,100	1,128	1,046	1,098
Hawaii	84	70	67	62	78	72
Idaho	181	212	272	319	303	257
Illinois	1,859	2,203	2,011	1,870	1,623	1,913
Indiana	2,993	3,365	3,321	3,696	3,687	3,412
Iowa	592	608	713	728	597	647
Kansas	323	325	354	435	349	357
Kentucky	1,172	1,171	1,015	1,194	1,007	1,112
Louisiana	3,717	3,747	3,537	2,721	2,723	3,289
Maine	277	290	286	229	307	278
Maryland	1,065	1,114	1,078	1,110	1,279	1,129
Massachusetts	1,080	763	788	609	614	771
Michigan	932	882	865	753	620	811
Minnesota	241	232	229	234	225	232
Mississippi	1,136	1,370	1,253	1,294	1,334	1,277
Missouri	858	901	818	816	838	846
Montana	330	295	349	339	353	333
Nebraska	168	232	209	301	273	237
Nevada	34	40	38	40	40	38
New Hampshire	266	300	320	336	308	306
New Jersey	2,200	2,528	2,430	2,663	2,252	2,414
New Mexico	164	281	204	168	7	165
New York	660	715	657	677	563	654
North Carolina	1,104	1,615	1,458	1,284	1,176	1,327
North Dakota	33	34	35	37	32	34
Ohio	3,238	3,540	3,426	3,381	3,058	3,328
Oklahoma	378	355	349	331	339	350
Oregon	306	319	342	319	278	313
Pennsylvania	2,675	3,130	3,185	3,174	3,045	3,042
Rhode Island	2,114	1,770	1,423	1,067	974	1,469
South Carolina	1,817	1,874	1,914	2,140	1,893	1,928
South Dakota	67	55	42	46	52	52
Tennessee	2,465	2,536	2,252	2,173	2,349	2,355
Texas	1,001	979	983	975	920	971
Utah	976	1,222	1,251	1,046	1,250	1,149
Vermont	48	59	43	67	42	52
Virginia	1,325	1,369	1,343	1,366	1,365	1,354
<b>Washington</b>	<b>403</b>	<b>451</b>	<b>455</b>	<b>357</b>	<b>369</b>	<b>407</b>
West Virginia	1,190	1,022	1,081	904	723	984
Wisconsin	718	772	668	640	579	675
Wyoming	99	96	96	107	114	102
U.S. Average	645	691	669	649	613	653
<b>Washington's Rank</b>	<b>20</b>	<b>21</b>	<b>20</b>	<b>19</b>	<b>21</b>	<b>21</b>

Source: U.S. Environmental Protection Agency. Office of Pollution Prevention and Toxics.

Toxics Release Inventory Public Data Release Reports: 1989-2000. ([www.epa.gov](http://www.epa.gov))

Source: U.S. Department of Commerce, Economics and Statistics Administration, Statistical Abstract of the United States, 1995.

# State Health Index

The UnitedHealth Group State Health Rankings provide a composite indicator, by state, that measures the relative healthiness of each state and the general health of the population in the United States. Rankings are based on states' performance in five components: lifestyle, access to health care, occupational safety and disability, disease, and mortality. These components are in turn divided into a total of seventeen subcomponents, each contributing to the overall score according to different component weights. To prevent an extreme value from excessively influencing the overall score, the maximum value any state can receive for a component is limited to the national average plus or minus two standard deviations. These components are then calculated into the state health index, which is simply the percentage a state is above or below the national average.

Washington's state health index ranked 12<sup>th</sup> in 2001, down from 11<sup>th</sup> in 2000. Washington's strengths in 2001 include a low infant mortality rate (5.4 deaths per 1,000 births), low risk for heart disease (16 percent below the national average), and low motor vehicle deaths (1.2 deaths per 100,000,000 miles driven). Washington also had a decrease in the prevalence of smoking from 22.4 to 20.7 percent for the year. Washington has performed very well in the State Health Rankings over the last five years, with an average rank of 9<sup>th</sup> among the states and a score of 11 percent above the national average.

Chart 21  
State Health Index

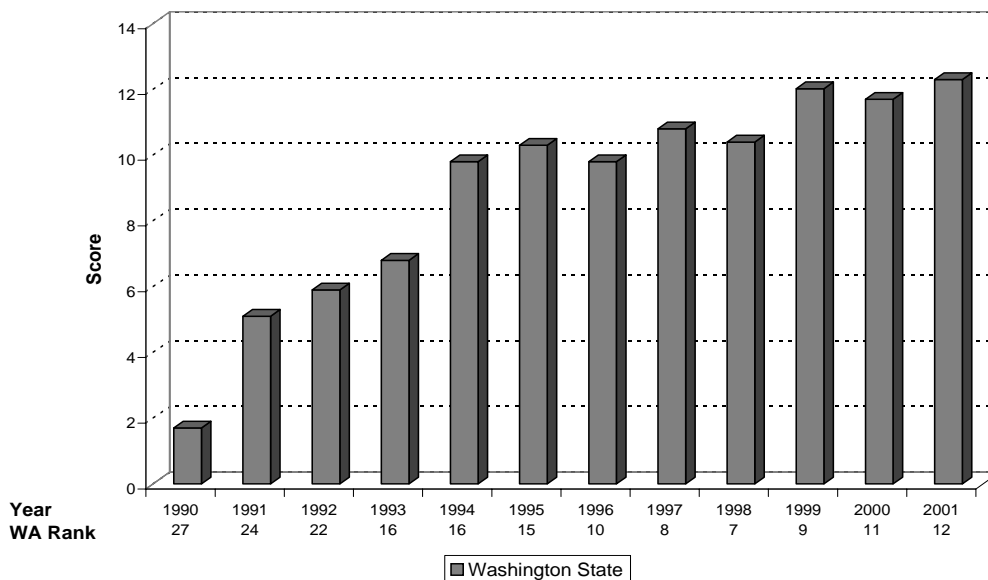


Table 21  
Quality of Life  
**State Health Index**  
\*Score

	1997	1998	1999	2000	2001	1997-01
Alabama	-7	-7	-10	-12	-11	-9
Alaska	-7	-8	-2	-2	2	-3
Arizona	-8	-10	-7	-6	-4	-7
Arkansas	-12	-17	-19	-14	-9	-14
California	3	5	4	4	5	4
Colorado	13	15	14	15	14	14
Connecticut	11	9	13	13	17	12
Delaware	-13	-11	-8	-5	-6	-9
Florida	-9	-9	-11	-11	-13	-11
Georgia	-1	-2	-4	-5	-5	-3
Hawaii	14	10	11	15	14	13
Idaho	2	1	4	4	7	4
Illinois	0	2	2	-1	-2	0
Indiana	3	3	4	1	5	3
Iowa	9	8	11	11	14	10
Kansas	7	6	5	7	7	6
Kentucky	-5	-7	-7	-7	-6	-6
Louisiana	-18	-17	-18	-18	-21	-18
Maine	3	3	11	12	14	8
Maryland	1	0	1	2	2	1
Massachusetts	14	12	16	16	15	15
Michigan	4	4	0	-1	0	2
Minnesota	20	22	23	22	23	22
Mississippi	-18	-18	-18	-19	-19	-18
Missouri	-3	-4	-4	-3	-2	-3
Montana	-0	-3	-2	1	2	-0
Nebraska	7	6	10	9	9	8
Nevada	-15	-14	-13	-12	-9	-13
New Hampshire	14	17	22	23	20	19
New Jersey	4	4	6	5	7	5
New Mexico	-14	-13	-9	-9	-8	-11
New York	-6	-7	-5	-4	-3	-5
North Carolina	-3	-1	-4	-4	-4	-3
North Dakota	7	6	10	10	11	9
Ohio	5	2	4	2	3	3
Oklahoma	-8	-11	-10	-11	-8	-10
Oregon	1	1	6	7	8	5
Pennsylvania	6	5	3	2	2	4
Rhode Island	2	4	8	7	10	6
South Carolina	-12	-12	-14	-15	-15	-13
South Dakota	1	4	4	6	6	4
Tennessee	-11	-12	-11	-10	-10	-11
Texas	-3	-3	-4	-5	-5	-4
Utah	14	13	15	17	19	16
Vermont	4	3	15	15	15	11
Virginia	10	9	10	9	10	9
<b>Washington</b>	<b>11</b>	<b>10</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>11</b>
West Virginia	-10	-13	-13	-14	-13	-12
Wisconsin	16	15	16	13	12	14
Wyoming	-5	-7	0	-2	-2	-3
U.S. Average	0	0	0	0	0	0
<b>Washington's Rank</b>	<b>8</b>	<b>7</b>	<b>9</b>	<b>11</b>	<b>12</b>	<b>9</b>

\*Scores reflect the percentage above or below the national average.

Source: UnitedHealth Group, UnitedHealth Group State Health Rankings: 1990-2001, ([www.unitedhealthfoundation.org](http://www.unitedhealthfoundation.org))

# State Parks and Recreation Areas

Washington lays claim to one of the largest and busiest state park systems in the United States. With 125 developed parks covering over 260,000 acres, Washington ranks 6<sup>th</sup> among all 50 states in the number of areas managed. Furthermore, Washington ranks 4<sup>th</sup> in day-use attendance and 8<sup>th</sup> in the number of overnight visitors served. In 2001, Washington ranked 4<sup>th</sup> in total visitation with 47,774,327 visitors.

State parks provide areas that enrich the quality of life by providing recreational spaces where people exercise, enjoy the natural environment, and maintain their well being. In addition to the numerous social values generated by state parks, several economic benefits exist. Local economies prosper from the increased demand for gas, food and lodging. State parks also provide employment opportunities. The Washington State Parks and Recreation Commission reports that state parks employ approximately 500 full time employees.

Since state park visits per capita were recorded, Washington has consistently placed in the top 5 among the states. Over the past five years, Washington has ranked 4<sup>th</sup> in per capita park visits. In 2001, each of Washington's residents visited a state park an average of eight times.

Chart 22  
State Parks and Recreation Areas

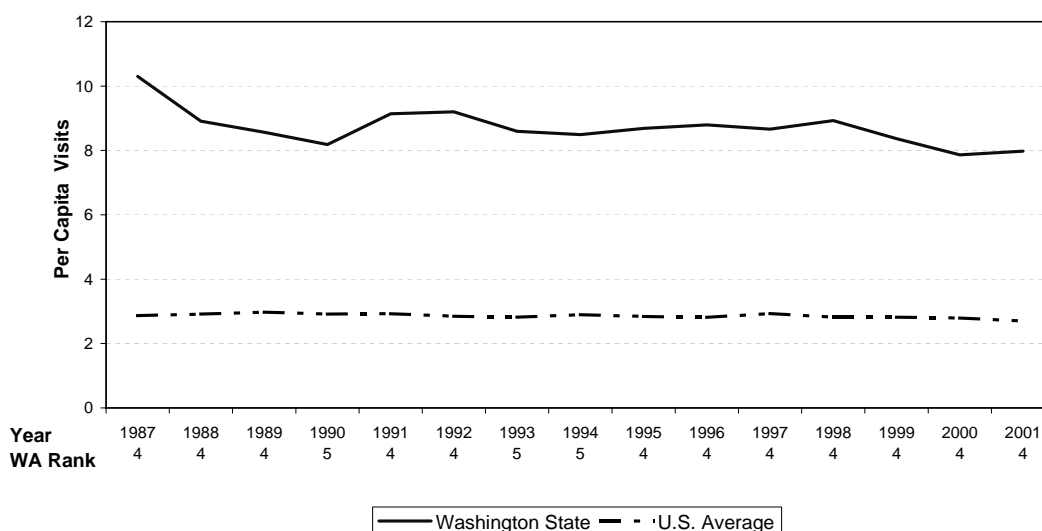


Table 22  
Quality of Life  
**State Parks and Recreational Areas**  
(Per Capita Park Visits)

	1997	1998	1999	2000	2001	1997-01
Alabama	1.3	1.3	1.4	1.3	1.2	1.3
Alaska	6.7	5.6	6.2	6.2	5.8	6.1
Arizona	0.5	0.5	0.5	0.5	0.5	0.5
Arkansas	3.1	2.8	2.5	2.5	2.9	2.8
California	3.6	2.6	2.3	2.9	2.3	2.7
Colorado	3.0	2.9	2.3	2.4	2.4	2.6
Connecticut	2.5	2.6	2.4	2.2	2.2	2.4
Delaware	3.7	3.5	5.3	5.0	4.0	4.3
Florida	0.9	0.9	1.0	1.0	1.1	1.0
Georgia	1.8	2.0	2.0	2.0	1.8	1.9
Hawaii	12.7	11.8	12.7	15.0	15.2	13.5
Idaho	1.9	1.8	1.9	2.0	1.8	1.9
Illinois	3.4	3.3	3.5	3.6	3.5	3.5
Indiana	3.0	3.0	3.1	3.0	2.9	3.0
Iowa	4.3	4.7	5.1	5.2	5.2	4.9
Kansas	2.6	2.6	2.7	2.7	2.8	2.7
Kentucky	2.2	2.2	1.9	1.9	1.9	2.0
Louisiana	0.3	0.3	0.3	0.4	0.4	0.4
Maine	1.6	1.6	2.0	1.8	1.8	1.7
Maryland	2.1	1.9	2.1	1.9	1.8	2.0
Massachusetts	2.2	2.1	2.2	2.0	1.9	2.1
Michigan	2.4	2.7	2.8	2.8	2.6	2.6
Minnesota	1.8	1.8	1.8	1.7	1.7	1.7
Mississippi	1.7	1.7	1.5	1.5	1.5	1.6
Missouri	3.1	3.2	3.2	3.2	3.2	3.2
Montana	1.6	1.6	1.7	1.5	1.5	1.6
Nebraska	5.7	5.7	5.6	5.6	5.8	5.7
Nevada	1.9	1.9	1.5	1.7	1.6	1.7
New Hampshire	0.8	3.1	3.6	4.1	5.3	3.4
New Jersey	1.8	1.8	1.8	1.8	1.8	1.8
New Mexico	1.9	2.9	2.7	2.5	2.2	2.4
New York	3.7	3.7	3.4	3.1	2.9	3.4
North Carolina	1.4	1.7	1.7	1.5	1.5	1.6
North Dakota	1.7	1.7	1.7	1.7	1.7	1.7
Ohio	5.2	4.2	5.3	4.9	5.2	5.0
Oklahoma	4.8	4.9	4.6	4.7	4.4	4.7
Oregon	12.2	12.0	11.7	11.2	11.4	11.7
Pennsylvania	2.9	2.9	3.0	3.0	3.0	2.9
Rhode Island	3.1	5.0	6.4	5.9	6.0	5.3
South Carolina	2.5	2.6	2.5	2.3	2.2	2.4
South Dakota	8.8	9.2	9.3	9.3	10.0	9.3
Tennessee	5.4	5.7	5.8	5.3	5.0	5.4
Texas	1.1	1.1	1.1	0.9	0.8	1.0
Utah	3.5	3.7	3.3	3.0	2.8	3.2
Vermont	1.5	1.3	1.4	1.2	1.3	1.4
Virginia	0.7	0.7	0.8	0.8	0.8	0.8
<b>Washington</b>	<b>8.7</b>	<b>8.9</b>	<b>8.4</b>	<b>7.9</b>	<b>8.0</b>	<b>8.4</b>
West Virginia	4.4	4.4	4.6	4.4	4.5	4.5
Wisconsin	2.5	2.6	2.7	2.9	3.0	2.7
Wyoming	4.5	4.6	4.5	5.1	4.8	4.7
U.S. Average	2.9	2.8	2.8	2.8	2.7	2.8
<b>Washington's Rank</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>

Source: National Association of State Parks Directors. Washington State Parks and Recreation Commission. Annual Information Exchange 1981-2001.



# State Arts

State arts agencies play a major role in making the arts accessible to the public. They support special events such as concerts in the park, touring artist groups, and arts festivals. State arts agencies also support public art programs, which is specifically for the integration of artwork (sculpture, murals, paintings, glasswork, etc.) in the renovation or construction of certain state buildings, such as schools or departmental offices. Some theaters, operas, and orchestras are able to offer reduced price seating or special free performances due in part to government support.

It is difficult to quantify the effectiveness of state art programs. However, we can use the total revenue collected by state arts agencies to get a sense of the commitment a state makes to the arts. Total state art agency revenue\* includes state legislative appropriations, funds from the National Endowment for the Arts (NEA), private support, and other state funds, including transfer funds and special funding mechanisms. Some of the discipline areas that these dollars support include dance, theatre, visual arts, photography, literature, folk arts, and the humanities. State dollars make up more than 85% of the state arts agency's total revenue in Washington.

Although Washington has one of the oldest and highest funded public art programs in the nation, overall state arts support is below the national average. Between fiscal years 1998 and 2002, Washington's total state art agency revenue per capita averaged \$0.73, compared to the national average of \$1.53 and ranked 44<sup>th</sup> over this five-year period. In fiscal year 2002, Washington's per capita figure of \$0.83 was considerably lower than the national average of \$1.71, placing it at 41<sup>st</sup> among all states.

*\*Though state arts agencies are the primary source for state funding, some states also fund the arts through other agencies, such as arts education funding through the Department of Education.*

Chart 23  
State Arts

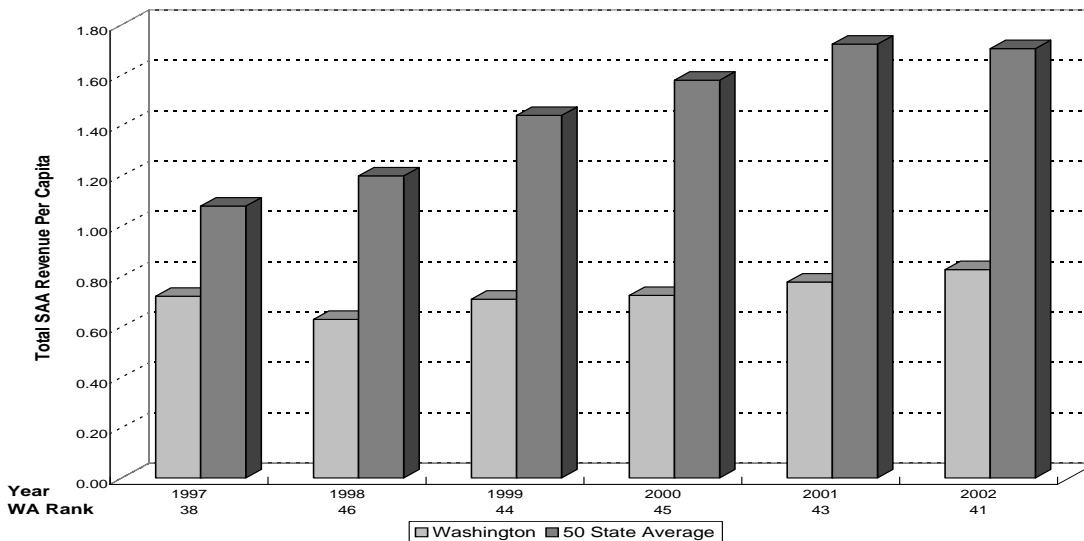


Table 23  
Quality of Life  
**State Arts**  
Total Per Capita State Arts Agency Revenue\*

(Fiscal Years)	1998	1999	2000	2001	2002	1998-02
Alabama	1.03	1.20	1.23	1.51	1.41	1.28
Alaska	1.56	1.58	1.59	1.70	1.65	1.62
Arizona	0.81	0.92	0.94	0.97	0.93	0.91
Arkansas	0.68	0.82	0.95	0.81	0.92	0.84
California	0.43	1.41	1.57	2.03	1.28	1.35
Colorado	0.84	1.09	1.05	0.92	0.81	0.94
Connecticut	3.35	3.61	5.85	6.30	6.54	5.13
Delaware	2.46	2.73	2.80	2.82	2.84	2.73
Florida	1.69	2.36	1.90	2.35	2.04	2.07
Georgia	0.66	0.68	0.70	0.66	0.69	0.68
Hawaii	5.65	5.69	5.75	5.40	5.62	5.62
Idaho	1.04	1.25	1.14	1.13	1.19	1.15
Illinois	1.18	1.45	1.87	1.66	1.68	1.57
Indiana	0.60	0.60	0.73	0.72	0.69	0.67
Iowa	0.72	0.77	0.85	0.92	0.73	0.80
Kansas	0.75	0.75	0.82	0.78	0.80	0.78
Kentucky	1.13	1.15	1.16	1.15	1.12	1.14
Louisiana	1.11	1.28	1.28	1.23	1.30	1.24
Maine	0.77	1.00	1.40	1.02	1.05	1.05
Maryland	1.72	1.82	2.21	2.52	2.67	2.19
Massachusetts	2.47	2.92	3.05	3.03	3.19	2.93
Michigan	2.26	2.27	2.26	2.66	2.76	2.44
Minnesota	2.88	2.88	2.86	2.79	2.85	2.85
Mississippi	0.85	1.05	1.07	1.46	1.43	1.17
Missouri	1.94	1.98	2.22	2.23	1.67	2.01
Montana	1.81	1.94	1.83	1.94	2.04	1.91
Nebraska	1.13	1.63	1.63	1.37	1.30	1.41
Nevada	0.97	1.02	1.14	0.98	0.95	1.01
New Hampshire	0.88	1.03	1.07	0.86	0.97	0.96
New Jersey	1.78	2.03	2.46	2.72	2.77	2.35
New Mexico	1.86	1.88	1.71	1.30	1.34	1.62
New York	2.30	2.55	2.80	3.03	2.75	2.68
North Carolina	0.82	0.88	1.10	1.05	0.86	0.94
North Dakota	1.31	1.41	1.43	1.47	1.64	1.45
Ohio	1.36	1.41	1.55	1.49	1.39	1.44
Oklahoma	1.27	1.46	1.48	1.49	1.55	1.45
Oregon	0.71	0.62	0.60	0.69	0.56	0.63
Pennsylvania	0.82	0.94	1.05	1.20	1.19	1.04
Rhode Island	1.39	1.41	1.54	2.75	2.92	2.00
South Carolina	1.26	1.36	1.63	1.59	1.30	1.43
South Dakota	1.29	1.31	1.38	1.40	1.55	1.39
Tennessee	0.73	0.77	0.88	0.96	0.84	0.84
Texas	0.29	0.30	0.37	0.26	0.30	0.30
Utah	1.84	2.02	1.99	1.86	1.65	1.87
Vermont	1.89	2.58	2.60	2.72	2.56	2.47
Virginia	0.54	0.64	0.71	0.74	0.76	0.68
<b>Washington</b>	<b>0.63</b>	<b>0.71</b>	<b>0.73</b>	<b>0.78</b>	<b>0.83</b>	<b>0.73</b>
West Virginia	1.18	1.42	2.00	2.18	2.61	1.88
Wisconsin	0.64	0.67	0.68	0.57	0.58	0.63
Wyoming	1.89	1.85	2.05	2.00	2.18	1.99
U.S. Average	1.20	1.44	1.58	1.72	1.71	1.53
<b>Washington's Rank</b>	<b>46</b>	<b>44</b>	<b>45</b>	<b>43</b>	<b>41</b>	<b>44</b>

\*Though state arts agencies are the primary source for state funding, some states also fund the arts through other agencies, such as arts education funding through the Department of Education.

Source: National Assembly of State Arts Agencies, July 2002.

# Public Library Service

Public libraries contribute to the quality of life by providing a multitude of educational and recreational functions and services. Public libraries serve people of all ages and backgrounds by providing spaces for community meetings and study halls, storing a wealth of information and entertainment in books, and providing computer and Internet access.

The benchmark, total circulation per capita, is used to gauge the quality, magnitude, and availability of public library resources and services. Circulation is the checking out of items (i.e., books, CDs, videos) to the public and is a reliable indicator because most transactions are electronically recorded. This data is collected from every state and the National Center for Educational Statistics (NCES) presents the cumulative form.

Washington has had excellent performance in this arena, with an average state ranking of 4th from the years 1996 to 2000. During that period, the state had an average per capita circulation of 9.8 compared to the national average of 6.5. Washington's 2000 state ranking was 7<sup>th</sup>, with per capita circulation of 9.4 compared to the national average of 6.4.

Chart 24  
Public Library Service

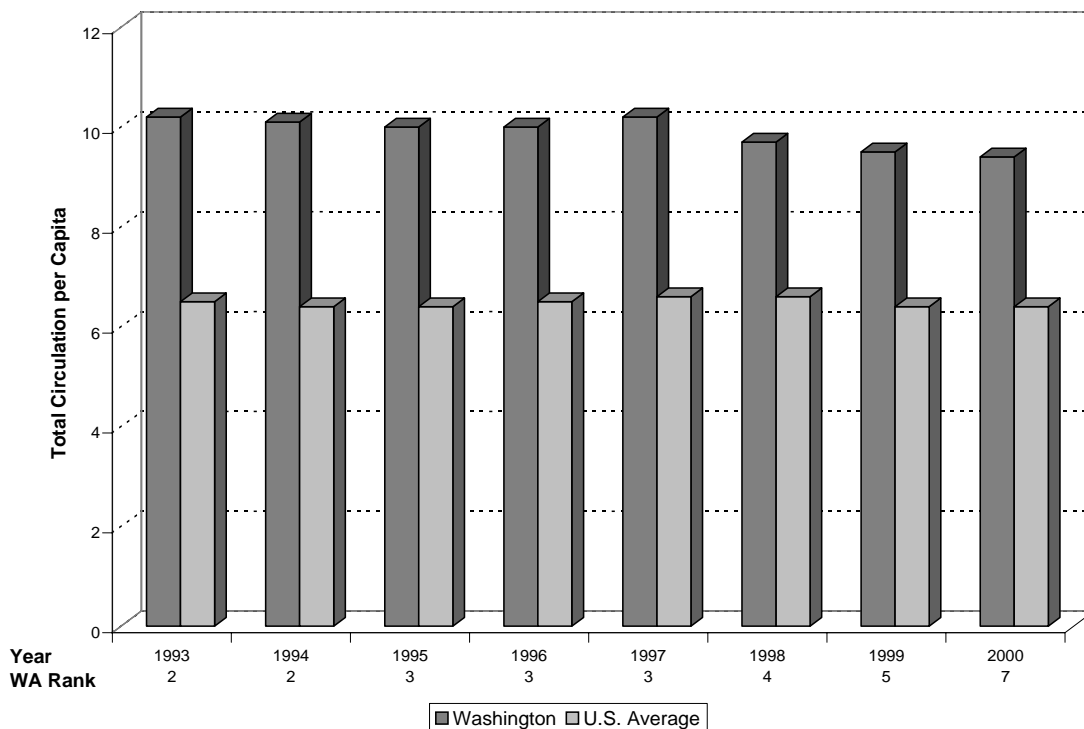


Table 24  
Quality of Life  
**Public Library Service**  
(Circulation per Capita)

	1996	1997	1998	1999	2000	1996-2000
Alabama	3.9	4.0	4.0	3.6	3.5	3.8
Alaska	6.2	6.1	6.1	6.2	5.8	6.1
Arizona	6.5	6.3	6.2	6.2	6.4	6.3
Arkansas	4.2	4.3	4.0	4.0	4.2	4.1
California	4.7	4.9	5.0	4.9	4.8	4.9
Colorado	8.4	8.8	9.2	9.5	9.5	9.1
Connecticut	8.3	8.6	8.5	8.4	8.5	8.5
Delaware	4.7	5.3	5.5	5.8	6.3	5.5
Florida	5.4	5.1	4.9	4.9	4.7	5.0
Georgia	4.6	4.6	4.5	4.6	4.4	4.5
Hawaii	6.2	6.4	6.5	6.2	5.8	6.2
Idaho	7.7	7.9	7.8	7.8	7.4	7.7
Illinois	7.7	7.9	7.9	7.8	7.7	7.8
Indiana	10.5	11.0	10.9	10.6	11.1	10.8
Iowa	8.8	9.0	9.0	8.5	8.6	8.8
Kansas	9.6	9.8	9.7	9.5	9.6	9.6
Kentucky	5.3	5.4	5.5	5.1	5.1	5.3
Louisiana	4.3	4.4	4.3	4.1	4.0	4.2
Maine	7.7	7.8	7.9	7.2	7.0	7.5
Maryland	9.0	9.2	8.9	8.9	8.9	9.0
Massachusetts	7.3	7.4	7.7	7.5	7.4	7.5
Michigan	5.4	5.5	5.5	5.4	5.5	5.5
Minnesota	9.6	9.5	9.1	8.7	8.9	9.2
Mississippi	3.2	3.3	3.3	3.1	3.1	3.2
Missouri	7.9	8.4	8.6	8.4	8.1	8.3
Montana	6.1	5.9	5.8	5.5	5.5	5.8
Nebraska	7.6	8.0	8.1	7.8	8.0	7.9
Nevada	5.0	5.1	5.0	4.5	4.8	4.9
New Hampshire	7.4	7.6	7.5	7.3	7.2	7.4
New Jersey	6.0	6.1	5.9	5.7	5.5	5.8
New Mexico	5.5	5.4	5.6	5.3	5.2	5.4
New York	7.3	7.4	7.4	7.3	7.3	7.3
North Carolina	5.6	5.8	5.7	5.6	5.6	5.7
North Dakota	7.2	7.2	7.3	7.3	7.2	7.2
Ohio	12.4	12.6	12.5	12.4	12.8	12.5
Oklahoma	6.3	6.0	5.9	5.9	5.9	6.0
Oregon	10.0	10.2	10.2	10.3	11.1	10.4
Pennsylvania	4.7	4.7	4.8	4.7	4.7	4.7
Rhode Island	6.8	6.6	6.6	6.5	6.2	6.5
South Carolina	4.4	4.5	4.5	4.5	4.5	4.5
South Dakota	8.9	9.3	8.9	8.6	7.4	8.6
Tennessee	3.9	4.0	4.0	4.0	3.8	3.9
Texas	4.2	4.4	4.3	4.2	4.3	4.3
Utah	9.3	9.0	9.7	9.8	10.0	9.6
Vermont	7.0	7.4	6.9	7.2	7.2	7.1
Virginia	7.4	7.6	7.6	7.5	7.8	7.6
<b>Washington</b>	<b>10.0</b>	<b>10.2</b>	<b>9.7</b>	<b>9.5</b>	<b>9.4</b>	<b>9.8</b>
West Virginia	4.6	5.3	5.1	4.7	4.6	4.9
Wisconsin	9.0	9.2	9.0	8.8	8.7	8.9
Wyoming	7.6	7.7	7.8	7.8	7.7	7.7
U.S. Average	6.5	6.6	6.6	6.4	6.4	6.5
<b>Washington's Rank</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>4</b>

Source: U.S. Department of Education, National Center for Education Statistics,  
Public Libraries in the United States: FY 1996-2000.

# Housing Opportunity Index

The Housing Opportunity Index (HOI), created by the National Association of Home Builders, is a measure of the percentage of new and existing homes sold in an area that a family earning the median income in that area can afford to buy. The index for the first quarter of 2002 was based on an analysis of more than 580,000 completed home sales in 191 metropolitan area markets nationwide. The average HOI for this period was 64.8, up from 56.9 in the first quarter of 2001, indicating that 64.8 percent of the homes sold in these metropolitan areas would be affordable to someone earning the median income for all of the areas.

Seven Washington metropolitan areas are included in the index: Bellingham, Bremerton, Olympia, Spokane, Tacoma, the Tri-Cities, and the Seattle-Bellevue-Everett area. Of these areas, two, Olympia and Spokane, had HOIs above the national average with index values of 64.9 and 66.1, respectively. Spokane had the highest HOI among the included Washington areas while the Tri-Cities had the lowest with a HOI of 54.6. Spokane's HOI ranked 126<sup>th</sup> among the 191 metropolitan areas included in the index, while the Tri-Cities' ranked 155<sup>th</sup>.

Table 25

Cost of Living

**Housing Opportunity Index**

(First Quarter 2002)

Metropolitan Area	Share of Homes Affordable for Median Income	Family Income (000s)	Median Sales Price (000s)	Affordability Rank
Akron, OH PMSA+	79.9	55.6	109	53
Albany-Schenectady-Troy, NY MSA+	68.5	55.5	132	112
Amarillo, TX MSA*	68.7	44.8	98	111
Anchorage, AK MSA+	75.6	60.5	153	84
Ann Arbor, MI PMSA+	60.2	76.0	190	143
Asheville, NC*	67.2	49.0	127	121
Atlanta, GA MSA#	81.8	71.2	146	34
Atlantic-Cape May, NJ PMSA+	62.4	51.8	138	137
Austin-San Marcos, TX MSA#	67.9	71.1	178	118
Bakersfield, CA MSA+	69.4	40.3	110	107
Baltimore, MD PMSA#	77.4	66.4	143	70
Barnstable-Yarmouth, MA MSA*	36.7	56.5	227	174
Baton Rouge, LA MSA+	81.6	49.2	111	35
Beaumont-Port Arthur, TX MSA+	80.6	46.8	83	44
<b>Bellingham, WA*</b>	<b>59.6</b>	<b>50.2</b>	<b>160</b>	<b>146</b>
Benton Harbor, MI MSA*	70.2	55.1	111	103
Bergen-Passaic, NJ PMSA#	61.5	78.9	227	140
Biloxi-Gulfport-Pascagoula, MS MSA+	71.6	44.4	109	97
Birmingham, AL MSA+	73.4	52.7	134	94
Boise City, ID+	77.7	54.5	131	66
Boston, MA-NH PMSA#	48.2	74.2	257	161
Boulder-Longmont, CO PMSA+	62.4	87.9	255	137
Brazoria, TX PMSA*	65.2	57.1	147	128
<b>Bremerton, WA PMSA*</b>	<b>62.5</b>	<b>51.5</b>	<b>154</b>	<b>136</b>
Buffalo-Niagara Falls, NY MSA#	80.1	50.8	86	50
Burlington, VT MSA*	64.6	57.4	157	130
Canton-Massillon, OH MSA+	83.0	51.9	103	28
Champaign-Urbana, IL MSA*	87.0	59.6	89	12
Charleston, WV+	83.2	45.9	92	26
Charleston-North Charleston, SC MSA+	68.5	49.2	138	112
Charlotte-Gastonia-Rock Hill, NC-SC MSA#	73.7	64.1	153	92
Chicago, IL PMSA#	73.7	75.4	176	92
Chico-Paradise, CA MSA*	40.9	39.2	153	167
Cincinnati, OH-KY-IN PMSA#	83.6	64.3	125	24
Cleveland-Lorain-Elyria, OH PMSA#	79.9	60.0	123	53

\*Denotes population below 250,000; + Denotes population of 250,000 to 1 million;

# Denotes population over 1 million.

“MSA” Metropolitan Statistical Area

“PMSA” Primary Metropolitan Statistical Area

Source: National Association of Home Builders (www.nahb.com), July 2002

Table 25 (cont.)

<b>Metropolitan Area</b>	<b>Share of Homes Affordable for Median Income</b>	<b>Family Income (000s)</b>	<b>Median Sales Price (000s)</b>	<b>Affordability Rank</b>
Colorado Springs, CO MSA+	60.1	56.8	174	144
Columbia, SC MSA+	81.5	56.4	120	37
Columbus, OH MSA#	78.2	63.4	140	63
Dallas, TX PMSA#	70.5	66.5	155	100
Danbury, CT PMSA*	60.6	98.1	270	142
Davenport-Moline-Rock Island, IA-IL MSA+	89.8	53.6	82	7
Dayton-Springfield, OH MSA+	90.0	60.2	101	6
Denver, CO PMSA#	59.6	69.9	208	146
Des Moines, IA+	84.5	66.9	120	21
Detroit, MI PMSA#	67.1	69.9	156	122
Duluth-Superior, MN-WI MSA*	81.1	50.8	109	41
El Paso, TX MSA+	68.8	36.3	86	109
Elkhart-Goshen, IN MSA*	94.9	59.3	111	1
Eugene-Springfield, OR+	38.9	43.8	135	169
Fargo-Moorhead, ND-MN*	94.5	55.9	88	3
Fayetteville, NC+	80.0	43.7	95	52
Flint, MI PMSA+	66.5	55.6	124	125
Fort Collins-Loveland, CO MSA*	57.2	60.8	187	153
Fort Lauderdale, FL PMSA#	70.3	60.2	140	102
Fort Myers-Cape Coral, FL MSA+	74.2	52.1	125	91
Fort Pierce-Port St. Lucie, FL MSA+	78.4	52.4	115	61
Fort Walton Beach, FL MSA*	83.8	50.4	116	23
Fort Worth-Arlington, TX PMSA#	79.7	61.3	127	56
Fresno, CA MSA+	52.1	40.3	134	156
Gainesville, FL MSA*	76.1	48.1	113	80
Galveston-Texas City, TX PMSA*	58.9	52.5	138	149
Goldsboro, NC MSA*	76.4	45.3	108	77
Grand Rapids-Muskegon-Holland, MI MSA#	80.6	61.3	123	44
Greeley, CO PMSA*	41.3	47.9	165	166
Greensboro-Winston-Salem-High Point, NC MSA#	83.2	56.1	125	26
Greenville, NC MSA*	71.6	49.1	110	97
Greenville-Spartanburg-Anderson, SC MSA+	81.5	53.2	116	37
Hagerstown, MD PMSA*	76.6	53.5	129	76
Hamilton-Middletown, OH PMSA+	83.9	62.6	133	22
Harrisburg-Lebanon-Carlisle, PA MSA+	80.4	55.4	116	47
Hartford, CT MSA#	75.8	66.6	146	83
Hattiesburg, MS MSA*	68.5	39.1	100	112
Honolulu, HI MSA+	59.7	62.6	195	145
Houma, LA MSA*	67.1	38.3	111	122
Houston, TX PMSA#	67.8	59.6	138	119

\*Denotes population below 250,000; + Denotes population of 250,000 to 1 million;

# Denotes population over 1 million.

“MSA” Metropolitan Statistical Area

“PMSA” Primary Metropolitan Statistical Area

Source: National Association of Home Builders ([www.nahb.com](http://www.nahb.com)), July 2002

Table 25 (cont.)

<b>Metropolitan Area</b>	<b>Share of Homes Affordable for Median Income</b>	<b>Family Income (000s)</b>	<b>Median Sales Price (000s)</b>	<b>Affordability Rank</b>
Indianapolis, IN MSA#	88.6	64.1	125	11
Jackson, MS MSA+	81.3	53.1	110	40
Jacksonville, FL MSA#	77.8	55.6	128	64
Jersey City, NJ PMSA+	45.4	60.1	200	164
Kalamazoo-Battle Creek, MI MSA+	67.0	53.8	116	124
Kansas City, MO-KS MSA#	86.4	64.5	125	13
Knoxville, TN+	77.7	52.0	113	66
Kokomo, IN*	94.8	61.9	99	2
Lafayette, IN*	86.1	58.8	123	14
Lafayette, LA+	62.7	37.4	110	134
Lakeland-Winter Haven, FL MSA+	85.5	47.0	95	17
Lansing-East Lansing, MI MSA+	80.9	60.1	112	42
Las Vegas, NV-AZ MSA#	70.2	54.3	153	103
Lawrence, MA-NH PMSA+	38.1	67.4	260	171
Lexington, KY MSA+	80.6	56.3	123	44
Little Rock-North Little Rock, AR+	77.0	49.7	113	72
Los Angeles-Long Beach, CA PMSA#	34.4	55.1	240	176
Louisville, KY-IN MSA+	77.8	56.3	124	64
Lowell, MA-NH PMSA+	35.6	75.2	300	175
Mansfield, OH MSA*	83.5	49.2	90	25
Medford-Ashland, OR MSA*	29.1	41.9	149	179
Melbourne-Titusville-Palm Bay, FL MSA+	84.9	52.9	106	19
Memphis, TN-AR-MS MSA#	76.1	57.3	126	80
Merced, CA MSA*	33.0	39.4	163	178
Miami, FL PMSA#	58.1	48.2	138	151
Milwaukee-Waukesha, WI PMSA#	76.0	67.2	130	82
Minneapolis-St. Paul, MN-WI MSA#	76.7	76.7	180	74
Mobile, AL+	78.7	45.1	97	58
Modesto, CA+	33.6	46.5	182	177
Muncie, IN*	89.1	48.9	99	9
Naples, FL MSA*	68.8	69.8	178	109
Nashua, NH PMSA*	58.7	71.1	197	150
Nashville, TN MSA#	78.6	61.6	139	59
Nassau-Suffolk, NY PMSA#	74.8	83.0	190	90
New Bedford, MA PMSA*	39.9	47.5	180	168
New Haven-Meriden, CT PMSA+	75.5	65.3	143	86
New London-Norwich, CT-RI MSA+	70.0	58.6	150	105
New Orleans, LA MSA#	69.5	44.0	121	106
New York, NY PMSA#	49.9	62.8	217	159
Newark, NJ PMSA#	62.1	78.7	204	139

\*Denotes population below 250,000; + Denotes population of 250,000 to 1 million;

# Denotes population over 1 million.

“MSA” Metropolitan Statistical Area

“PMSA” Primary Metropolitan Statistical Area

Source: National Association of Home Builders ([www.nahb.com](http://www.nahb.com)), July 2002



Table 25 (cont.)

Metropolitan Area	Share of Homes Affordable for Median Income	Family Income (000s)	Median Sales Price (000s)	Affordability Rank
Norfolk-Virginia Beach-Newport News, VA-NC MS	75.5	53.8	125	86
Oakland, CA PMSA#	23.9	74.5	350	182
Ocala, FL MSA*	82.8	41.6	86	29
Oklahoma City, OK MSA#	80.1	46.0	92	50
<b>Olympia, WA PMSA*</b>	<b>64.9</b>	<b>53.0</b>	<b>150</b>	<b>129</b>
Omaha, NE-IA MSA+	82.2	64.4	119	33
Orange County, CA PMSA#	37.7	75.6	315	172
Orlando, FL MSA#	75.5	54.7	134	86
Panama City, FL MSA*	80.2	46.3	109	49
Pensacola, FL MSA+	82.8	45.3	105	29
Peoria-Pekin, IL MSA+	90.8	57.8	85	5
Philadelphia, PA-NJ PMSA#	76.7	63.3	132	74
Phoenix-Mesa, AZ MSA#	75.4	57.9	146	89
Pittsburgh, PA MSA#	69.4	48.9	101	107
Pittsfield, MA MSA*	65.7	50.4	129	127
Portland-Vancouver, OR-WA PMSA#	46.6	57.2	167	163
Portsmouth-Rochester, NH-ME PMSA*	21.5	57.3	240	184
Providence-Fall River-Warwick, RI-MA, MSA#	76.8	54.1	128	73
Provo-Orem, UT MSA+	60.7	50.4	157	141
Pueblo, CO MSA*	64.1	39.4	108	131
Punta Gorda, FL MSA*	80.3	44.9	92	48
Raleigh-Durham-Chapel Hill, NC MSA#	75.6	71.3	162	84
Reading, PA MSA+	79.9	53.3	109	53
Redding, CA MSA*	50.2	39.0	134	158
Reno, NV MSA+	70.8	62.3	170	99
<b>Richland-Kennewick-Pasco, WA, MSA*</b>	<b>54.6</b>	<b>49.5</b>	<b>150</b>	<b>155</b>
Richmond-Petersburg, VA MSA+	79.3	65.9	149	57
Riverside-San Bernardino, CA PMSA#	49.6	50.3	177	160
Rochester, NY MSA#	78.6	54.9	97	59
Rockford, IL MSA+	84.9	59.8	111	19
Rocky Mount, NC MSA*	76.4	48.8	106	77
Sacramento, CA PMSA#	43.7	57.3	218	165
Saginaw-Bay City-Midland, MI MSA+	82.6	55.1	85	32
Salem, OR PMSA+	50.4	46.7	131	157
Salinas, CA MSA+	7.7	53.8	319	191
Salt Lake City-Ogden, UT MSA#	68.3	57.2	154	117
San Antonio, TX MSA#	68.5	46.2	112	112
San Diego, CA MSA#	21.6	60.1	290	183
San Francisco, CA PMSA#	9.2	86.1	525	189
San Jose, CA PMSA#	20.1	96.0	451	185

\*Denotes population below 250,000; + Denotes population of 250,000 to 1 million;

# Denotes population over 1 million.

“MSA” Metropolitan Statistical Area

“PMSA” Primary Metropolitan Statistical Area

Source: National Association of Home Builders (www.nahb.com), July 2002

Table 25 (cont.)

Metropolitan Area	Share of Homes Affordable for Median Income	Family Income (000s)	Median Sales Price (000s)	Affordability Rank
San Luis Obispo-Atascadero-Paso Robles, CA MS	13.0	50.3	290	188
Santa Barbara-Santa Maria-Lompoc, CA MSA+	25.2	56.8	272	181
Santa Cruz-Watsonville, CA PMSA*	8.0	69.0	420	190
Santa Fe, NM, MSA*	59.6	63.1	202	146
Santa Rosa, CA PMSA+	15.3	63.4	329	187
Sarasota-Bradenton, FL MSA+	72.6	53.4	134	95
<b>Seattle-Bellevue-Everett, WA PMSA#</b>	<b>63.1</b>	<b>77.9</b>	<b>234</b>	<b>133</b>
South Bend, IN MSA+	80.8	55.7	105	43
<b>Spokane, WA, MSA+</b>	<b>66.1</b>	<b>46.6</b>	<b>125</b>	<b>126</b>
Springfield, IL MSA*	92.6	64.9	90	4
Springfield, MA MSA+	76.4	50.7	122	77
Springfield, MO, MSA+	88.7	49.2	88	10
St. Louis, MO-IL MSA#	77.6	61.4	126	68
Stockton-Lodi, CA MSA+	27.2	47.5	220	180
Syracuse, NY MSA+	82.8	50.3	78	29
<b>Tacoma, WA PMSA+</b>	<b>54.7</b>	<b>52.0</b>	<b>165</b>	<b>154</b>
Tallahassee, FL MSA+	85.1	57.2	122	18
Tampa-St. Petersburg-Clearwater, FL MSA#	77.4	50.5	117	70
Toledo, OH MSA+	81.6	56.7	108	35
Trenton, NJ PMSA+	68.4	74.1	161	116
Tucson, AZ MSA+	70.4	49.2	129	101
Tulsa, OK MSA+	77.5	46.9	104	69
Vallejo-Fairfield-Napa, CA PMSA+	17.9	57.2	271	186
Ventura, CA PMSA+	36.9	74.7	303	173
Vineland-Millville-Bridgeton, NJ PMSA*	85.6	50.2	92	16
Visalia-Tulare-Porterville, CA MSA+	63.6	37.4	110	132
Washington, DC-MD-VA-WV PMSA#	78.3	91.5	200	62
Waterbury, CT PMSA*	62.7	62.2	168	134
West Palm Beach-Boca Raton, FL MSA+	72.6	62.8	147	95
Williamsport, PA MSA*	81.4	41.9	83	39
Wilmington-Newark, DE-MD PMSA+	89.4	75.9	149	8
Worcester, MA-CT PMSA+	57.4	58.4	180	152
Yolo, CA PMSA*	38.9	57.0	221	169
Youngstown-Warren, OH MSA+	85.8	46.4	82	15
Yuba City, CA MSA*	47.2	39.3	140	162
Yuma, AZ MSA*	67.5	36.8	97	120
<b>National</b>	<b>64.8</b>	<b>54.4</b>	<b>160</b>	

\*Denotes population below 250,000; + Denotes population of 250,000 to 1 million;

# Denotes population over 1 million.

“MSA” Metropolitan Statistical Area

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Source: National Association of Home Builders ([www.nahb.com](http://www.nahb.com)), July 2002

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# **Education and Skills of the Workforce**

# Fourth Grade Reading and Mathematics

(Not Updated due to Unavailability of Data)

The National Assessment of Education Progress (NAEP) program, sponsored by the U.S. Department of Education, is the only testing program that provides valid uniform educational achievement indicators allowing for state comparisons. The NAEP assesses students in grades 4, 8, and 12 in various academic subjects. These subjects include the arts, geography, reading, science, civics, mathematics, U.S. History, and writing. The Washington State Economic Climate Study tracks the average scale score of fourth grade reading and mathematics by state.

Prior to the 2002-03 school year, participation in the NAEP tests was voluntary, with single-subject tests held every two years, alternating subjects every two years. As such, states that either declined to participate or had an insufficient number of participating schools to create a valid average state score are excluded from the state rankings. Washington did not participate in the inaugural 1992 mathematics and reading tests, and had insufficient voluntary participation in the 2000 mathematics test. Washington did participate in the 2002 reading test, but the results were not ready in time for this publication.

As of the 2002-03 school year, participation in the NAEP test will be mandatory due to the provisions of the “No Child Left Behind Act”, which was passed by the Federal Government in 2001. Under the act, the NAEP tests in both reading and mathematics will be given to students in the 4<sup>th</sup> and 8<sup>th</sup> grades every two years, starting in the 2002-03 school year.

NAEP scores can be interpreted using the achievement level thresholds and their corresponding definitions outlined below. Reading achievement is measured with exercises that require students to read material for two different purposes, literary experience and knowledge retention. Washington first participated in the reading assessment in 1994 and ranked 19<sup>th</sup> with a score of 213 among the 39 participants. In 1998, Washington dropped in ranking to 16<sup>th</sup>, despite its improved score of 217. The skills and content covered in the mathematics section include spatial sense, data analysis, statistics, probability, algebra and functions. Washington participated in the mathematics assessment in 1996 and ranked 17<sup>th</sup> out of 43 participants with a score of 225.

Chart 26  
Grade 4 Public School Students  
Average Reading Proficiency Scores

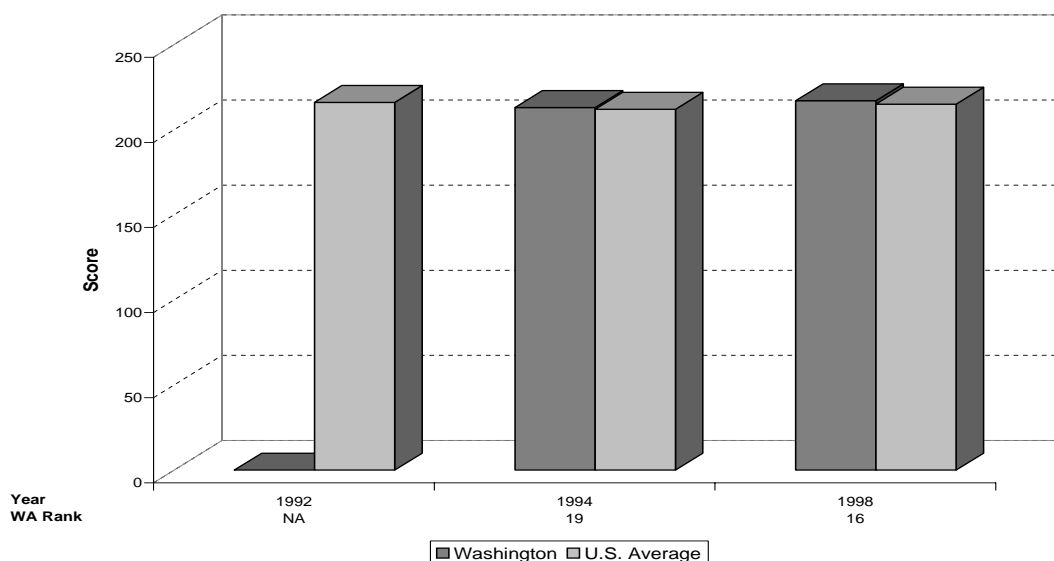


Table 26  
Education and Skills of the Workforce  
**Grade 4 Public School Students:**  
Average Reading Scale Scores

	1992	1994	1998	1992-98
Alabama	208	208	211	209
Alaska	NA	NA	NA	NA
Arizona	210	206	207	208
Arkansas	212	209	209	210
California	203	197	202	201
Colorado	218	213	222	218
Connecticut	223	222	232	226
Delaware	214	206	212	211
Florida	209	205	207	207
Georgia	213	207	210	210
Hawaii	204	201	200	202
Idaho	221	NA	NA	221
Illinois	NA	NA	NA	NA
Indiana	222	220	NA	221
Iowa	227	223	223	224
Kansas	NA	NA	222	222
Kentucky	214	212	218	215
Louisiana	205	197	204	202
Maine	228	228	225	227
Maryland	212	210	215	212
Massachusetts	227	223	225	225
Michigan	217	NA	217	217
Minnesota	22	218	222	154
Mississippi	200	202	204	202
Missouri	221	217	216	218
Montana	NA	222	226	224
Nebraska	222	220	NA	221
Nevada	NA	NA	208	208
New Hampshire	229	223	226	226
New Jersey	224	219	NA	222
New Mexico	212	205	206	208
New York	216	212	216	215
North Carolina	213	214	217	215
North Dakota	227	225	NA	226
Ohio	219	NA	NA	219
Oklahoma	221	NA	220	221
Oregon	NA	NA	214	214
Pennsylvania	222	215	NA	219
Rhode Island	218	220	218	219
South Carolina	211	203	210	208
South Dakota	NA	NA	NA	NA
Tennessee	213	213	212	213
Texas	214	212	217	214
Utah	222	217	215	218
Vermont	NA	NA	NA	NA
Virginia	222	213	218	218
<b>Washington</b>	<b>NA</b>	<b>213</b>	<b>217</b>	<b>215</b>
West Virginia	217	213	216	215
Wisconsin	225	224	224	224
Wyoming	224	221	219	221
U.S. Average	216	212	215	214
<b>Washington's Rank</b>	<b>NA</b>	<b>19</b>	<b>16</b>	<b>25</b>

NA: State did not participate in the NAEP assessment during this year.

Source: National Center for Education Statistics. National Assessment of Education Progress (NAEP) 1992, 1994, 1998 Reading Report Card.

#### Grade 4 Reading Achievement Levels

<b>Basic 208</b>	Fourth-grade students performing at the Basic level should demonstrate an understanding of the overall meaning of what they read. When reading text appropriate for fourth graders, they should be able to make relatively obvious connections between the text and their own experiences and extend the ideas in the text by making simple inferences.
<b>Proficient 238</b>	Fourth-grade students performing at the Proficient level should be able to demonstrate an overall understanding of the text, providing inferential as well as literal information. When reading text appropriate to fourth grade, they should be able to extend the ideas in the text by making inferences, drawing conclusions, and making connections to their own experiences. The connection between the text and what the student infers should be clear.
<b>Advanced 268</b>	Fourth-grade students performing at the Advanced level should be able to generalize about topics in the reading selection and demonstrate an awareness of how authors compose and use literary devices. When reading text appropriate to fourth grade, they should be able to judge text critically and, in general, give thorough answers that indicate careful thought.

#### Grade 4 Mathematics Achievement Levels

<b>Basic 214</b>	Fourth graders performing at the Basic level should be able to estimate and use basic facts to perform simple computations with whole numbers; show some understanding of fractions and decimals; and solve some simple real-world problems in all NAEP content areas. Students at this level should be able to use--though not always accurately--four-function calculators, rulers, and geometric shapes. Their written responses are often minimal and presented without supporting information.
<b>Proficient 249</b>	Fourth graders performing at the proficient level should be able to use whole numbers to estimate, compute, and determine whether results are reasonable. They should have a conceptual understanding of fractions and decimals; be able to solve real-world problems in all NAEP content areas; and use four-function calculators, rulers, and geometric shapes appropriately. Students performing at the proficient level should employ problem-solving strategies such as identifying and using appropriate information. Their written solutions should be more organized and presented both with supporting information and explanations of how they were achieved.
<b>Advanced 282</b>	Fourth graders performing at the advanced level should be able to solve complex and nonroutine real-world problems in all NAEP content areas. They should display mastery in the use of four-function calculators, rulers and geometric shapes. The students are expected to draw logical conclusions and to justify answers and solutions processes by explaining why, as well as how, they were achieved. They should go beyond the obvious in their interpretations and to be able to communicate their thoughts clearly and concisely.

Chart 27  
Grade 4 Public School Students:  
Average Mathematics Scale Scores

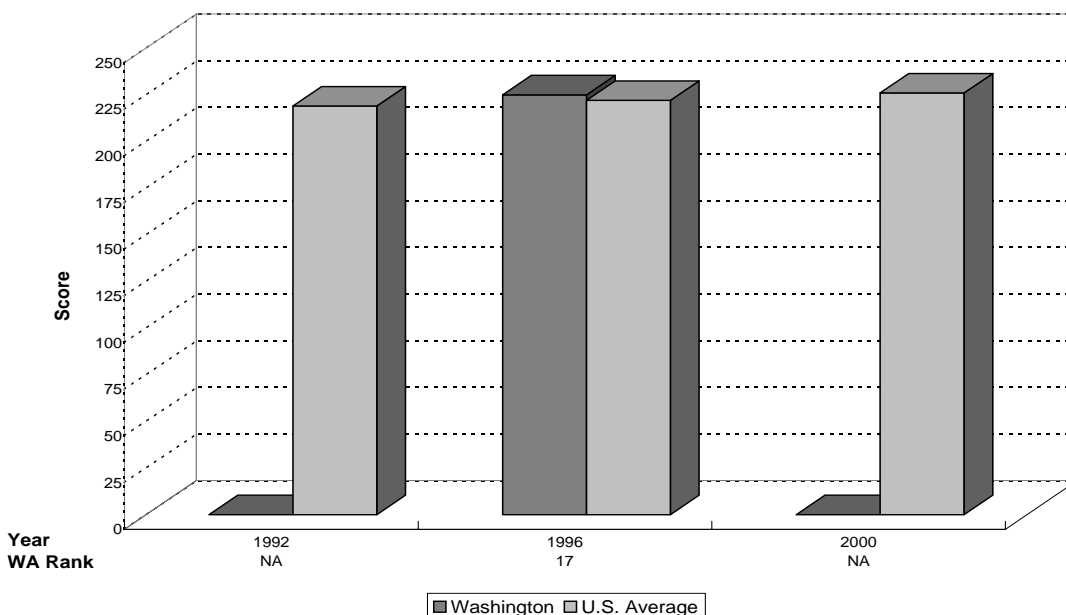


Table 27  
Education and Skills of the Workforce  
**Grade 4 Public School Students:**  
Average Mathematics Scale Scores

	1992	1996	2000	1992-96
Alabama	208	212	218	210
Alaska	NA	224	NA	224
Arizona	215	218	219	217
Arkansas	210	216	217	213
California	208	209	214	209
Colorado	221	226	NA	224
Connecticut	227	232	234	230
Delaware	218	215	NA	217
Florida	214	216	NA	215
Georgia	216	215	220	216
Hawaii	214	215	216	215
Indiana	221	229	234	225
Iowa	230	229	233	230
Kentucky	215	220	221	218
Louisiana	204	209	218	207
Maine	232	232	231	232
Maryland	217	221	222	219
Massachusetts	227	229	235	228
Michigan	220	226	231	223
Minnesota	228	232	235	230
Mississippi	202	208	211	205
Missouri	222	225	229	224
Montana	NA	228	230	228
Nebraska	225	228	226	227
Nevada	NA	218	220	218
New Jersey	227	227	NA	227
New Mexico	213	214	214	214
New York	218	223	227	221
North Carolina	213	224	232	219
North Dakota	229	231	231	230
Oregon	NA	223	227	223
Pennsylvania	224	226	NA	225
Rhode Island	215	220	225	218
South Carolina	212	213	220	213
Tennessee	211	219	220	215
Texas	218	229	233	224
Utah	224	227	227	226
Vermont	NA	225	232	225
Virginia	221	223	230	222
<b>Washington</b>	<b>NA</b>	<b>225</b>	<b>NA</b>	<b>225</b>
West Virginia	215	223	225	219
Wisconsin	229	231	NA	230
Wyoming	225	223	229	224
U.S. Average	219	222	226	221
<b>Washington's Rank</b>	<b>NA</b>	<b>17</b>	<b>NA</b>	<b>12</b>

NA: State did not participate in the NAEP assessment during this year.

Source: National Center for Education Statistics. National Assessment of Education Progress (NAEP) 1992, 1996, 2000 Reading Report Card.



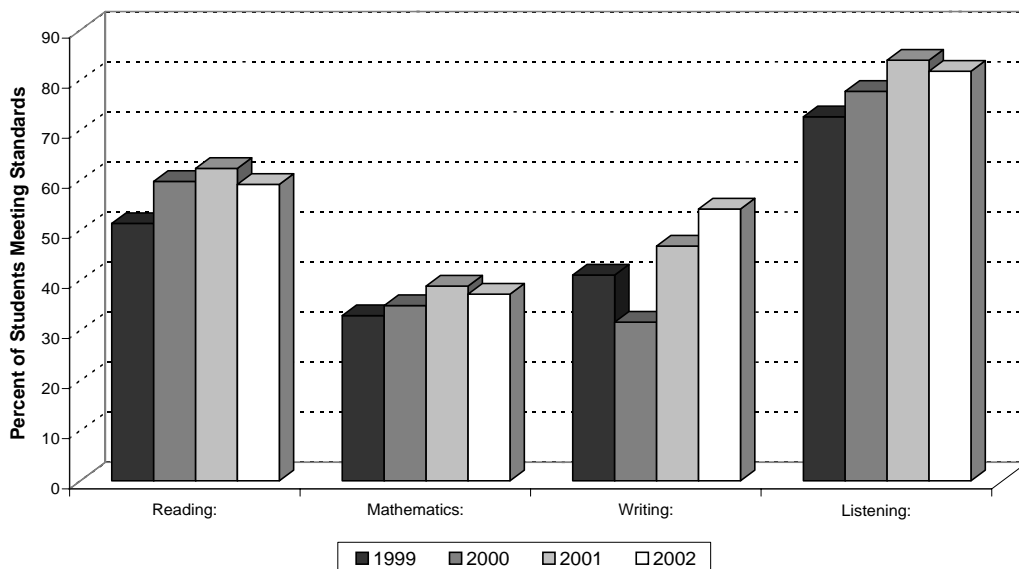
# Tenth Grade WASL Scores

The Washington Assessment of Student Learning (WASL) is a statewide assessment designed to measure whether public school students have mastered the state's Essential Academic Learning Requirements in reading, writing, listening and mathematics in grades 4, 7 and 10. The WASL is administered each spring and is comprised of multiple-choice, short-answer and essay questions. In 2008, high school students must meet standards on the reading, writing, listening and mathematics sections of the tenth-grade WASL in order to graduate.

As the WASL is unique to Washington, test results cannot be compared to those in other states. The results are included here, however, as they provide an indication of Washington's progress in maximizing the number of students who are able to pass the WASL by the tenth grade.

As can be seen in Table 27, tenth-grade WASL scores in all subjects showed continuous improvement from 1999 through 2001. The 2002 test, however, showed declining performance in Reading, Mathematics, and Listening. There is evidence, however, that this decline is the result of both a recent student backlash against the test and the lack of motivation for tenth-graders to perform well on the test due to its current voluntary nature. The Office of the Superintendent of Public Instruction has reported that in the 2002 WASL, tenth-graders left more than 22 percent of open-ended mathematics questions unanswered. They also left unanswered three-times as many writing and reading questions as did the fourth-and seventh-grade students. In addition, the number of tenth-graders who either were absent for or refused to take the test was also much higher than in other grades. Both the Office of the Superintendent of Public Instruction and local school districts are exploring methods of improving student motivation and participation for the 2003 test.

Chart 28  
Tenth Grade WASL Scores



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Table 28  
Education and Skills of the Workforce  
**Tenth Grade WASL Test Scores**

	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>
Reading:	51.4	59.8	62.4	59.2
Mathematics:	33.0	35.0	38.9	37.3
Writing:	41.1	31.7	46.9	54.3
Listening:	72.7	77.8	84.0	81.8

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Source: Office of Superintendent of Public Instruction, September 2002 (<http://www.k12.wa.us>)

# Student to Teacher Ratios

Over the last decade, there has been a nationwide movement to decrease the student to teacher ratios in public schools. The success of this movement to date is evident in the steady decline of the national ratio from 17.4 students per teacher in the 1992-93 school year to 16.1 in the 1999-2000 school year.

Washington has shared in the national trend of declining student to teacher ratios since the 1995-96 school year, declining from 20.4 at that time to 19.9 in the 1999-2000 school year. As other states shared in the decline as well, however, Washington's rank among the states remained constant at 48<sup>th</sup> throughout this period.

Recognizing Washington's low national rank in this category, the state's voters passed Initiative 728 in November 2000. Under the initiative, which took effect on July 1, 2001, lottery revenues will be redirected from the State's General Fund to the Student Achievement Fund and the Education Construction Fund for the purpose of hiring additional teachers and expanding school facilities. The effects of this initiative will begin to be seen in the student to teacher ratios in the 2001-02 school year.

Chart 29

Student to Teacher Ratios in Elementary and Secondary Public Schools

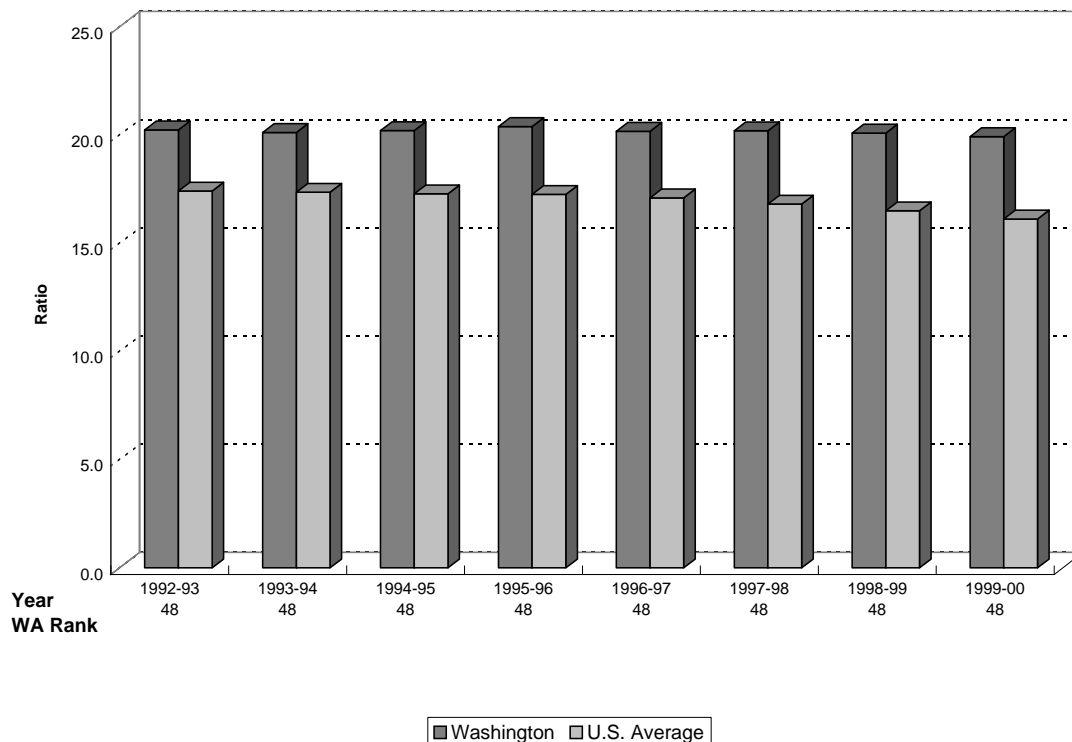


Table 29  
Education and Skills of the Workforce  
**Pupil to Teacher Ratios in Elementary  
and Secondary Public Schools**

	School Year					1995-00
	1995-96	1996-97	1997-98	1998-99	1999-00	
Alabama	16.9	16.6	16.3	15.7	15.2	16.1
Alaska	17.3	17.5	17.3	16.7	17.1	17.2
Arizona	19.6	19.7	19.8	20.0	19.4	19.7
Arkansas	17.1	17.1	16.9	16.2	14.4	16.4
California	24.0	22.9	21.6	21.0	21.0	22.1
Colorado	18.5	18.5	18.2	17.7	17.4	18.1
Connecticut	14.4	14.4	14.2	14.0	13.9	14.2
Delaware	16.8	16.6	16.3	16.0	15.4	16.2
Florida	18.9	18.6	18.4	18.4	18.3	18.5
Georgia	16.5	16.5	16.2	15.8	15.7	16.1
Hawaii	17.8	17.7	17.8	17.7	17.1	17.6
Idaho	19.0	18.8	18.5	18.2	18.0	18.5
Illinois	17.1	17.0	16.8	16.5	16.2	16.7
Indiana	17.5	17.3	17.2	17.0	16.8	17.2
Iowa	15.5	15.4	15.3	15.2	14.9	15.3
Kansas	15.1	15.1	14.9	14.8	14.3	14.8
Kentucky	16.9	16.7	16.5	16.1	15.4	16.3
Louisiana	17.0	16.6	16.6	16.6	16.6	16.7
Maine	13.9	13.7	13.5	13.2	12.8	13.4
Maryland	16.8	17.1	17.2	16.9	16.6	16.9
Massachusetts	14.6	14.5	14.1	13.8	12.5	13.9
Michigan	19.7	19.1	18.8	18.5	18.0	18.8
Minnesota	17.8	17.6	16.4	16.9	15.2	16.8
Mississippi	17.5	17.2	17.1	16.1	16.3	16.8
Missouri	15.4	15.2	15.0	14.7	14.3	14.9
Montana	16.4	16.0	15.9	15.7	15.2	15.8
Nebraska	14.5	14.5	14.5	14.3	13.9	14.3
Nevada	19.1	19.1	18.5	18.9	18.7	18.9
New Hampshire	15.7	15.6	15.6	15.4	14.7	15.4
New Jersey	13.8	14.0	13.9	13.8	13.4	13.8
New Mexico	17.0	16.7	16.9	16.5	16.4	16.7
New York	15.5	15.4	15.0	14.6	14.3	14.9
North Carolina	16.2	16.1	15.9	15.8	15.6	15.9
North Dakota	15.9	15.2	14.7	14.4	13.8	14.8
Ohio	17.1	17.0	16.7	16.2	15.8	16.5
Oklahoma	15.7	15.7	15.5	15.4	15.1	15.5
Oregon	19.8	20.1	20.1	20.0	19.6	19.9
Pennsylvania	17.0	17.0	16.8	16.4	15.9	16.6
Rhode Island	14.3	14.2	14.5	13.9	14.2	14.2
South Carolina	16.2	15.7	15.6	15.2	14.7	15.5
South Dakota	15.0	14.9	15.3	14.3	14.0	14.7
Tennessee	16.7	16.5	16.5	15.3	15.1	16.0
Texas	15.6	15.5	15.3	15.2	14.9	15.3
Utah	23.8	24.4	22.9	22.4	22.0	23.1
Vermont	13.8	13.7	13.4	12.8	12.3	13.2
Virginia	14.4	14.7	14.7	14.2	14.0	14.4
<b>Washington</b>	<b>20.4</b>	<b>20.2</b>	<b>20.2</b>	<b>20.1</b>	<b>19.9</b>	<b>20.2</b>
West Virginia	14.6	14.6	14.4	14.2	13.8	14.3
Wisconsin	15.8	16.1	15.4	14.4	14.4	15.2
Wyoming	14.8	14.7	14.5	14.2	13.3	14.3
U.S. Average	17.3	17.1	16.8	16.5	16.1	16.8
<b>Washington's Rank</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>

Source: U.S. Department of Education, National Center for Education Statistics. Digest of Educational Statistics, 2000, NCES 2001-034, by Thomas D. Synder and Charlene M. Hoffman, Washington, DC:2001. ([www.nces.gov](http://www.nces.gov))

# Education Attainment: Completed Four Years of High School or More

(Not updated due to unavailability of data)

Educational attainment has a significant influence on income, employment, and other factors important to the wellbeing of a state's residents and economy. The 2000 Current Population Survey of the U.S. Bureau of the Census found that the average annual wage for a high school dropout in the years 1997 through 1999 was only \$18,900 (in 1999 dollars) while that of a person with a high school diploma was \$25,900. In addition, the National Center for Educational Statistics reported that the 1999 unemployment rate for adults (25 years old and over) who had not completed high school was 6.7 percent compared with 3.5 percent for those with at least a high school degree.

In 2000, 91.8 percent of Washington's 25 and over population had completed 4 years of high school or more, ranking it 1<sup>st</sup> among the states. In the last 5 years, Washington has never ranked lower than 4<sup>th</sup> in this category. Washington's average percentage for the years 1996-2000 was 90.8 percent, 2<sup>nd</sup> among the states and well above the national average of 84.1 percent.

Chart 30  
Completed Four Years of High School or More



Table 30  
Education and Skills of the Workforce  
**Educational Attainment: Completed Four Years of High School or More**  
(Percent)\*

	1996	1997	1998	1999	2000	1996-00
Alabama	75.7	77.6	78.8	81.1	77.5	78.1
Alaska	91.4	92.1	90.6	92.8	90.4	91.5
Arizona	83.5	82.6	81.9	83.1	85.1	83.2
Arkansas	76.2	76.9	76.8	78.9	81.7	78.1
California	79.8	80.7	80.1	80.4	81.2	80.4
Colorado	89.1	87.6	89.6	90.4	89.7	89.3
Connecticut	85.3	84.0	83.7	83.7	88.2	85.0
Delaware	82.7	84.4	85.2	84.5	86.1	84.6
Florida	81.5	81.4	81.9	82.8	84.0	82.3
Georgia	76.5	78.8	80.0	80.7	82.6	79.7
Hawaii	84.4	83.7	84.6	88.0	87.4	85.6
Idaho	85.9	85.7	82.7	84.8	86.2	85.0
Illinois	83.2	84.4	84.2	85.4	85.5	84.5
Indiana	83.7	81.9	83.5	82.8	84.6	83.3
Iowa	87.4	86.7	87.7	89.8	89.7	88.3
Kansas	87.7	88.1	89.2	87.6	88.1	88.1
Kentucky	74.0	75.4	77.9	78.2	78.7	76.8
Louisiana	74.6	75.7	78.6	78.3	80.8	77.6
Maine	84.7	85.8	86.7	88.9	89.3	87.1
Maryland	84.6	84.7	84.7	84.7	85.7	84.9
Massachusetts	84.9	85.9	85.6	85.1	85.1	85.3
Michigan	84.2	86.0	85.4	85.5	86.2	85.5
Minnesota	87.9	87.9	89.4	91.1	90.8	89.4
Mississippi	75.2	77.5	77.3	78.0	80.3	77.7
Missouri	83.9	80.1	82.9	85.0	86.6	83.7
Montana	85.6	88.6	89.1	88.8	89.6	88.3
Nebraska	87.4	86.0	87.7	89.3	90.4	88.2
Nevada	85.4	85.4	89.1	86.4	82.8	85.8
New Hampshire	86.4	85.1	84.0	86.5	88.1	86.0
New Jersey	84.9	84.8	86.5	87.4	87.3	86.2
New Mexico	77.1	78.0	79.6	80.9	82.2	79.6
New York	81.6	80.0	81.5	81.9	82.5	81.5
North Carolina	76.0	78.4	81.4	79.8	79.2	79.0
North Dakota	80.2	82.6	84.3	84.9	85.5	83.5
Ohio	84.9	86.2	86.2	86.1	87.0	86.1
Oklahoma	83.8	85.2	84.6	83.5	86.1	84.6
Oregon	87.5	84.7	85.5	86.2	88.1	86.4
Pennsylvania	81.6	82.4	84.1	86.1	85.7	84.0
Rhode Island	78.6	77.5	80.7	80.9	81.3	79.8
South Carolina	73.8	77.3	78.6	78.6	83.0	78.3
South Dakota	82.4	85.6	86.3	88.7	91.8	87.0
Tennessee	79.0	76.1	76.9	79.1	79.9	78.2
Texas	76.4	87.5	78.3	78.2	79.2	79.9
Utah	90.7	89.5	89.3	91.0	90.7	90.2
Vermont	86.9	84.4	86.7	89.3	90.0	87.5
Virginia	82.0	81.3	82.6	87.3	86.6	84.0
<b>Washington</b>	<b>90.2</b>	<b>88.8</b>	<b>92.0</b>	<b>91.2</b>	<b>91.8</b>	<b>90.8</b>
West Virginia	74.7	77.3	76.4	75.1	77.1	76.1
Wisconsin	88.7	87.1	88.0	86.7	86.7	87.4
Wyoming	90.2	91.3	90.0	90.7	90.0	90.4
50 State Average	82.9	83.3	84.0	84.7	85.5	84.1
<b>Washington's Rank</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>

\*Percent of persons 25 years or older who have completed 4 years of high school or more.

Source: U.S. Department of Commerce, Bureau of the Census, Educational Attainment in the United States: March 1996-2000.  
(www.census.gov)

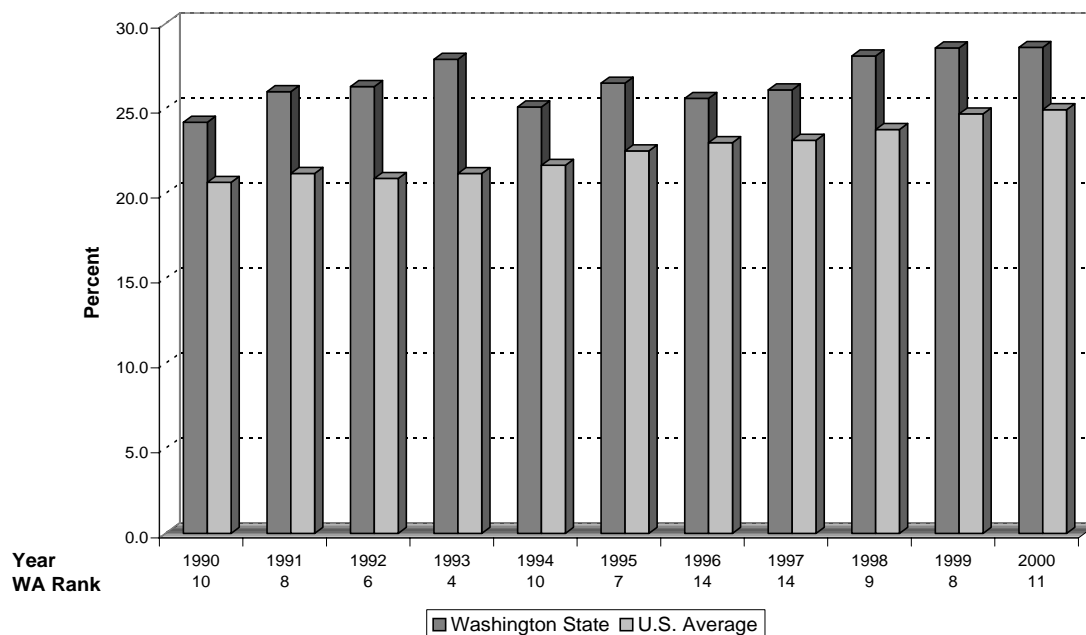
# Education Attainment: Completed Bachelors Degree or More

(Not updated due to unavailability of data)

The 2000 Current Population Survey of the U.S. Bureau of the Census found that while the average annual wage for a person with a high school diploma in the years 1997 through 1999 was \$25,900 (in 1999 dollars), that of a person who held at least a Bachelor's Degree was \$45,400. In addition, the National Center for Educational Statistics reported that the 1999 unemployment rate for adults (25 years old and over) with at least a high school degree was 3.5 percent compared with 1.8 percent for those who held at least a Bachelor's Degree. Clearly, having a high percentage of state population with Bachelor's Degrees or higher has a positive influence on a state's economy.

In 2000, 28.6 percent of Washington's population 25 years of age and over had completed a bachelor's degree or more, well above the national average of 24.9 percent. While this is the same percentage of people of that age who had completed at least a bachelor's degree in 1999, Washington declined in national rank from 8<sup>th</sup> in 1999 to 11<sup>th</sup> in 2000. Nonetheless, on average, Washington has been in the top ten states in this category for not only the years 1996-2000, but also for the last decade.

Chart 31  
Completed Bachelor's Degree or More



**Table 31**  
**Education and Skills of the Workforce**  
**Educational Attainment: Completed Bachelor's Degree or More**  
**(Percent)\***

	1996	1997	1998	1999	2000	1996-00
Alabama	18.0	19.3	20.6	21.8	20.4	20.0
Alaska	27.2	27.5	24.2	25.5	28.1	26.5
Arizona	20.4	19.5	21.9	24.2	24.6	22.1
Arkansas	14.6	14.6	16.2	17.3	18.4	16.2
California	26.8	27.5	26.4	27.1	27.5	27.1
Colorado	30.4	28.9	34.0	38.7	34.6	33.3
Connecticut	32.3	30.0	31.4	33.5	31.6	31.8
Delaware	27.4	26.8	25.1	24.0	24.0	25.5
Florida	20.4	21.7	22.5	21.6	22.8	21.8
Georgia	22.4	22.3	20.7	21.5	23.1	22.0
Hawaii	23.9	22.5	24.0	26.2	26.3	24.6
Idaho	20.3	19.4	20.3	20.8	20.0	20.2
Illinois	24.5	25.0	25.8	25.6	27.1	25.6
Indiana	16.2	16.2	17.7	18.4	17.1	17.1
Iowa	21.3	21.7	20.3	21.7	25.5	22.1
Kansas	26.5	27.5	28.5	26.5	27.3	27.3
Kentucky	17.5	17.6	20.1	19.8	20.5	19.1
Louisiana	19.2	18.1	19.5	20.7	22.5	20.0
Maine	19.7	20.0	19.2	22.9	24.1	21.2
Maryland	32.5	32.2	31.8	34.7	32.3	32.7
Massachusetts	32.4	33.5	31.0	31.0	32.7	32.1
Michigan	21.1	21.0	22.1	21.3	23.0	21.7
Minnesota	26.3	28.3	31.0	32.0	31.2	29.8
Mississippi	16.9	20.9	19.5	19.2	18.7	19.0
Missouri	24.3	22.9	22.4	23.0	26.2	23.8
Montana	21.9	25.2	23.9	23.9	23.8	23.8
Nebraska	24.0	21.3	20.9	20.4	24.6	22.2
Nevada	19.0	19.9	20.6	20.2	19.3	19.8
New Hampshire	27.6	27.0	26.6	27.2	30.1	27.7
New Jersey	28.3	28.5	30.1	30.5	30.1	29.5
New Mexico	20.8	23.6	23.1	24.5	23.6	23.1
New York	25.6	25.8	26.8	26.9	28.7	26.8
North Carolina	21.0	22.6	23.3	23.9	23.2	22.8
North Dakota	19.9	20.5	22.5	22.3	22.6	21.6
Ohio	22.3	21.5	21.5	25.5	24.6	23.1
Oklahoma	20.1	20.5	20.5	23.6	22.5	21.4
Oregon	22.8	24.3	27.7	26.8	27.2	25.8
Pennsylvania	22.3	22.9	22.1	23.9	24.3	23.1
Rhode Island	24.5	25.7	27.8	26.9	26.4	26.3
South Carolina	18.1	19.2	21.3	20.9	19.0	19.7
South Dakota	20.8	20.1	21.8	25.6	25.7	22.8
Tennessee	19.5	17.1	16.9	17.7	22.0	18.6
Texas	21.9	22.4	23.3	24.4	23.9	23.2
Utah	25.6	26.7	27.6	27.9	26.4	26.8
Vermont	27.1	23.7	27.1	28.3	28.8	27.0
Virginia	26.3	28.0	30.3	31.6	31.9	29.6
<b>Washington</b>	<b>25.6</b>	<b>26.1</b>	<b>28.1</b>	<b>28.6</b>	<b>28.6</b>	<b>27.4</b>
West Virginia	14.2	14.7	16.3	18.0	15.3	15.7
Wisconsin	24.0	22.4	22.3	23.6	23.8	23.2
Wyoming	24.2	22.2	19.8	22.3	20.6	21.8
U.S. Average	23.0	23.1	23.8	24.7	24.9	23.9
<b>Washington's Rank</b>	<b>14</b>	<b>14</b>	<b>9</b>	<b>8</b>	<b>11</b>	<b>9</b>

Source: U.S. Department of Commerce, Bureau of the Census. Educational Attainment in the United States: March 1996-2000. ([www.census.gov](http://www.census.gov))

\* Percent of persons 25 years old and over who have obtained a Bachelor's degree or higher.



# Public Two and Four Year College Combined Participation Rate

(Not updated due to unavailability of data. Data will be available from the Washington Office of Financial Management in November 2002 )

Washington, more than most states, relies heavily on the community college system to provide the first two years of a college education. This affects participation rates in predictable ways. Washington and states with a similar policy have higher than average two-year participation rates, and lower than average four-year participation rates. Since two- and four-year participation rates presented separately give a skewed view of Washington's overall participation rate, this report combines the two statistics to produce a participation rate inclusive of two and four-year participants. With this adjustment, states that are more reliant on the community college system can be better compared to other states.

With the combined measure, Washington's 1997 rate of 6.6 is comparable with the rest of the U.S. (an average rate of 5.7.) Washington's higher education participation rate has changed very little between 1993 and 1997, although its rank improved from 14<sup>th</sup> to 10<sup>th</sup>. It is important to note that the data from 1993 to present included students enrolled in five technical colleges. This accounts for the increase from 6.1 to 6.7 percent and improvement in rank from 23<sup>rd</sup> to 14<sup>th</sup> from 1992 to 1993.

Chart 32

Total Public Two and Four Year Combined Participation Rate

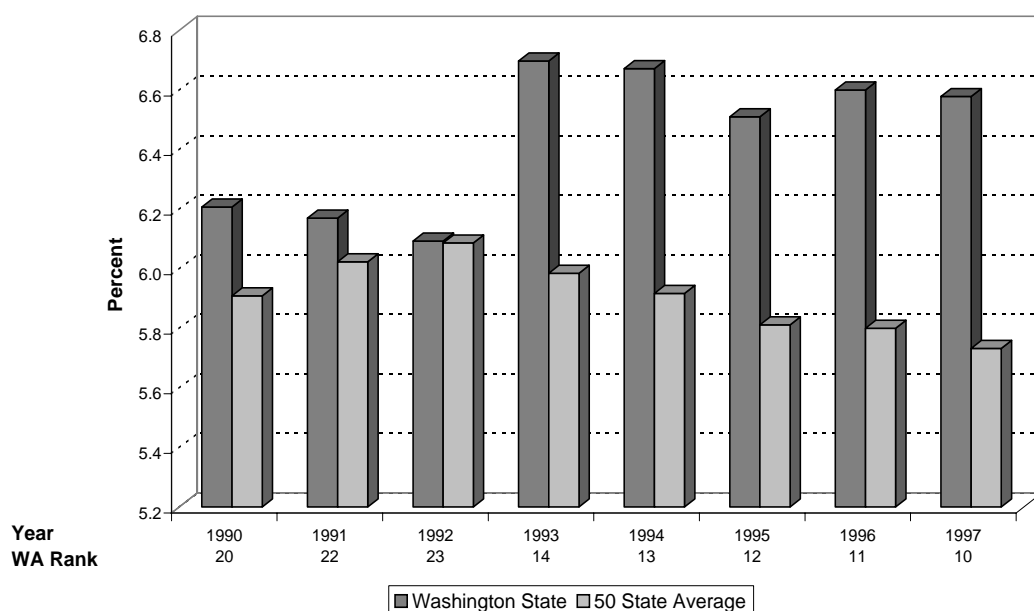


Table 32  
Education and Skills of the Workforce  
**Total Public Two and Four Year College Combined Participation Rate**  
(Participation Rate)\*

	1993	1994	1995	1996	1997	1993-97
Alabama	6.6	7.5	6.3	6.0	5.9	6.5
Alaska	6.9	6.5	6.7	6.5	6.2	6.6
Arizona	8.5	8.4	8.3	7.9	7.7	8.2
Arkansas	4.8	4.6	4.7	5.2	5.3	4.9
California	7.0	6.8	6.7	7.0	7.0	6.9
Colorado	7.9	7.7	7.5	7.5	7.5	7.6
Connecticut	4.2	4.1	4.0	3.9	3.8	4.0
Delaware	6.7	6.7	6.6	6.6	6.4	6.6
Florida	4.8	4.9	4.8	5.0	5.1	4.9
Georgia	4.7	4.6	4.6	4.6	4.5	4.6
Hawaii	5.7	5.8	5.6	5.3	5.0	5.5
Idaho	6.0	6.0	5.9	5.8	5.7	5.9
Illinois	6.3	6.2	6.0	6.0	6.0	6.1
Indiana	5.3	5.2	5.1	5.0	5.1	5.1
Iowa	5.7	5.7	5.7	5.8	5.9	5.8
Kansas	8.2	8.0	8.4	8.3	8.4	8.3
Kentucky	5.4	5.2	5.1	5.2	5.1	5.2
Louisiana	5.6	5.6	5.5	5.9	5.9	5.7
Maine	4.2	4.1	4.0	4.0	3.9	4.1
Maryland	6.0	5.9	5.8	5.7	5.6	5.8
Massachusetts	3.9	3.8	3.8	3.7	3.7	3.8
Michigan	6.8	6.6	6.5	6.2	6.2	6.5
Minnesota	6.2	6.7	6.3	6.1	5.8	6.2
Mississippi	5.7	5.5	5.6	5.7	5.9	5.7
Missouri	5.0	4.8	4.7	4.7	4.7	4.8
Montana	5.5	5.5	5.8	5.8	5.8	5.7
Nebraska	8.0	8.0	7.8	8.1	7.2	7.8
Nevada	6.1	5.8	5.8	6.0	5.8	5.9
New Hampshire	4.2	4.1	4.2	4.1	4.0	4.1
New Jersey	4.6	4.5	4.5	4.3	4.2	4.4
New Mexico	8.5	8.2	8.0	8.1	8.1	8.2
New York	4.4	4.4	4.3	4.1	4.1	4.2
North Carolina	5.7	5.6	5.5	5.4	5.3	5.5
North Dakota	7.7	7.7	7.6	7.6	7.2	7.6
Ohio	5.1	5.0	4.9	4.8	4.8	4.9
Oklahoma	6.7	6.7	6.5	6.6	6.5	6.6
Oregon	6.2	6.0	6.0	5.8	5.8	6.0
Pennsylvania	3.8	3.7	3.6	3.7	3.6	3.7
Rhode Island	5.3	5.1	5.1	4.9	4.9	5.0
South Carolina	5.4	5.4	5.3	5.3	5.1	5.3
South Dakota	6.0	5.9	5.6	6.0	6.0	5.9
Tennessee	5.0	4.8	4.8	4.9	4.7	4.9
Texas	6.4	6.3	6.2	6.0	6.0	6.2
Utah	8.1	8.5	8.3	8.3	8.4	8.3
Vermont	4.8	4.6	4.6	4.5	4.5	4.6
Virginia	5.9	5.8	5.8	5.7	5.8	5.8
<b>Washington</b>	<b>6.7</b>	<b>6.7</b>	<b>6.5</b>	<b>6.6</b>	<b>6.6</b>	<b>6.6</b>
West Virginia	5.5	5.4	5.2	5.3	5.3	5.3
Wisconsin	6.8	6.6	6.4	6.3	6.2	6.5
Wyoming	8.8	8.7	8.3	8.4	8.2	8.5
50 State Average	6.0	5.9	5.8	5.8	5.7	5.8
<b>Washington's Rank</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>10</b>

\*Participation rate: Headcount compared to population aged 17 & above.

Source: Integrated Post-Secondary Education Data System. National Center for Education Statistics, U.S. Department of Education. 1990-1995. Higher Education Enrollment Statistics and Projections. March 2000.

# Value Added Per Hour of Labor in Manufacturing

“Value added” in manufacturing is a measure of the difference between the value of a finished object and the value of the raw materials that went into its production. The total value added of an industry represents the amount of revenue available for payment of wages, rent, taxes, interest, profit, and all other business costs aside from raw materials.

The Annual Survey of Manufactures (ASM), published by the U.S. Census Bureau, provides estimates of worker hours and value added for all manufacturing establishments with one or more paid employee. As it is a sample survey, its estimates possess varying margins of error. To minimize the effects of these errors, the ASM estimates are presented in Table 32 as three-year moving averages. Due to ASM reclassification from the Standard Industrial Code (SIC) to the North American Industry Classification System (NAICS) in 1997, survey estimates prior to that date are not included due to non-comparability.

The amount of value added per hour of labor varies greatly among different industries. Highly automated industries such as semiconductors have very high value added per hour since one person can operate a machine that puts out a large volume of high-value product, while less automated industries such as furniture manufacturing require more labor per dollar of added value. (Highly automated industries, however, also have much higher equipment costs, so high value added does not necessarily imply high profit.) Within a specific industry, however, interstate differences in value added per worker hour may be interpreted as differences in worker productivity between states.

The differences in value-added across industries makes a state’s average value added per worker hour highly dependent upon its particular industry mix. States with a large percentage of high value added industries (such as semiconductors in New Mexico and Arizona) perform very well in this measure, reported as “Non-Weighted” in Table 32. Washington also performs well in this measure, indicating an industry mix of higher-than-average labor productivity.

To minimize the effects of industry mix on estimates of state productivity, the “Weighted” values in Table 32 represent value added per worker hour as if each state had an identical mix of industries. In this case, state worker hours in each of the 21 major NAICS manufacturing groups were adjusted to be identical in proportion to the national average. When measured in this way, Washington’s average value added per worker hour moves to slightly below the national average. This method, however, is still susceptible to error for two main reasons. The first reason is that most states are either totally lacking in several industries or have only one representative of an industry, which makes the data unreportable by the Census due to disclosure laws (though the data is included in the totals). These omissions are treated as an undifferentiated “remainder” industry that can skew a state’s average greatly depending upon what the productivity of the hidden industry is and the proportion of total hours the remainder represents. Alaska is a prime example, with all industries except food products hidden by disclosure laws. The second reason is that there is still a large degree of productivity variation within major NAICS categories. For example, NAICS group 334 includes semiconductor manufacturing along with computer, electronic instrument, and other electronics manufacturing industries with much lower labor productivity than semiconductors. When each state is given the same number of hours in group 334, therefore, those states who have a large percentage of semiconductor worker hours in that group will still record higher-than-average productivity in that group. For this reason, both Arizona and New Mexico still perform above average in the weighted results. Nevertheless, by accounting for most of the industry mix variation, the weighted results can still provide a general idea of where each state lies in the labor productivity spectrum.

Table 32  
Education and Skills of the Workforce  
**Value Added per Hour of Labor in Manufacturing**  
(Three Year Average, Dollars)

	<b>Weighted 1997-1999</b>	<b>Weighted 1998-2000</b>	<b>Non-Weighted 1997-1999</b>	<b>Non-Weighted 1998-2000</b>
Alabama	57.38	59.05	54.02	55.56
Alaska	121.75	114.76	61.29	59.12
Arizona	92.63	95.39	122.02	124.54
Arkansas	60.54	63.51	53.90	55.05
California	81.52	86.20	89.30	94.72
Colorado	78.16	78.71	86.63	86.16
Connecticut	89.88	92.49	88.56	90.77
Delaware	78.60	80.35	86.26	90.96
Florida	69.22	69.55	72.55	73.31
Georgia	75.23	77.38	70.89	73.25
Hawaii	73.68	99.20	65.59	67.78
Idaho	71.39	86.29	74.91	101.36
Illinois	74.09	77.03	75.61	78.40
Indiana	77.34	82.16	72.40	75.92
Iowa	79.50	81.68	77.96	78.34
Kansas	64.27	65.69	67.06	67.71
Kentucky	80.15	77.54	87.60	82.84
Louisiana	67.68	67.34	107.84	109.63
Maine	58.76	63.93	58.32	64.33
Maryland	80.41	80.99	85.87	85.94
Massachusetts	79.53	83.06	90.61	95.04
Michigan	70.83	71.97	73.37	74.78
Minnesota	76.00	75.91	73.96	78.04
Mississippi	53.33	57.19	47.78	49.56
Missouri	80.30	79.46	84.66	83.38
Montana	82.22	73.19	64.81	61.64
Nebraska	68.17	66.38	62.53	64.99
Nevada	69.16	69.94	65.44	71.20
New Hampshire	70.77	69.15	79.40	75.46
New Jersey	75.42	79.62	90.05	93.41
New Mexico	102.06	93.62	217.52	197.84
New York	72.46	75.74	74.40	78.39
North Carolina	74.43	74.12	70.62	75.01
North Dakota	58.24	55.24	68.93	71.62
Ohio	79.64	81.20	77.54	78.81
Oklahoma	75.06	71.69	70.09	70.24
Oregon	71.48	74.39	80.81	84.72
Pennsylvania	76.57	78.92	74.13	76.62
Rhode Island	53.88	53.72	54.48	57.54
South Carolina	67.08	69.75	64.41	66.36
South Dakota	61.22	65.34	80.32	84.91
Tennessee	64.75	67.73	62.48	64.96
Texas	82.37	84.26	94.90	95.84
Utah	68.70	70.61	70.82	73.80
Vermont	79.45	84.22	74.61	79.80
Virginia	77.64	81.46	85.43	92.74
<b>Washington</b>	<b>74.01</b>	<b>77.70</b>	<b>82.62</b>	<b>87.71</b>
West Virginia	60.27	62.74	81.52	81.63
Wisconsin	71.68	75.94	68.53	71.74
Wyoming	69.57	71.65	83.93	86.00
U.S.	77.67	80.31	77.67	80.31
<b>WA Rank</b>	<b>26</b>	<b>21</b>	<b>16</b>	<b>12</b>

Source: U.S. Department of Commerce, Census Bureau, Annual Survey of Manufactures

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# Infrastructure

# Interstate Miles in Poor Condition

Since 1990, the Federal Highway Administration (FHWA) has required states to report road roughness according to the International Roughness Index (IRI). The IRI is collected in accordance with the Highway Performance Monitoring System Field Manual for the Continuing Analytical and Statistical Database. This document mandates standard codes for the collection and publication of the IRI and therefore ensures that various data will be reported in a consistent format. The IRI is used in the development of Federal highway legislation and is published annually in the FHWA's Highway Statistics. On a state level, this information is used as an aid to highway planning, programming, budgeting, forecasting and fiscal management. Maintaining interstate and highway conditions is crucial for ensuring safety, improving efficiency, and allowing fluid movement of people and goods throughout the state.

In 2000, Washington matched its 1999 record low of 1.4 percent of interstate miles in poor condition, ranking 23<sup>rd</sup> in the nation. In 1996 and 1997, Washington ranked 41<sup>st</sup> and 40<sup>th</sup> respectively with 10 and 8.9 percent of its interstates considered in poor condition. The magnitude of the improvement from 1996-97 to 1998-99 can largely be attributed to heavy construction on Interstates 90, 82, and 5 during 1997. The 1997-99 biennium witnessed \$60.8 million in improvements from the paving program.

Chart 34  
Interstate Highways in Poor Condition

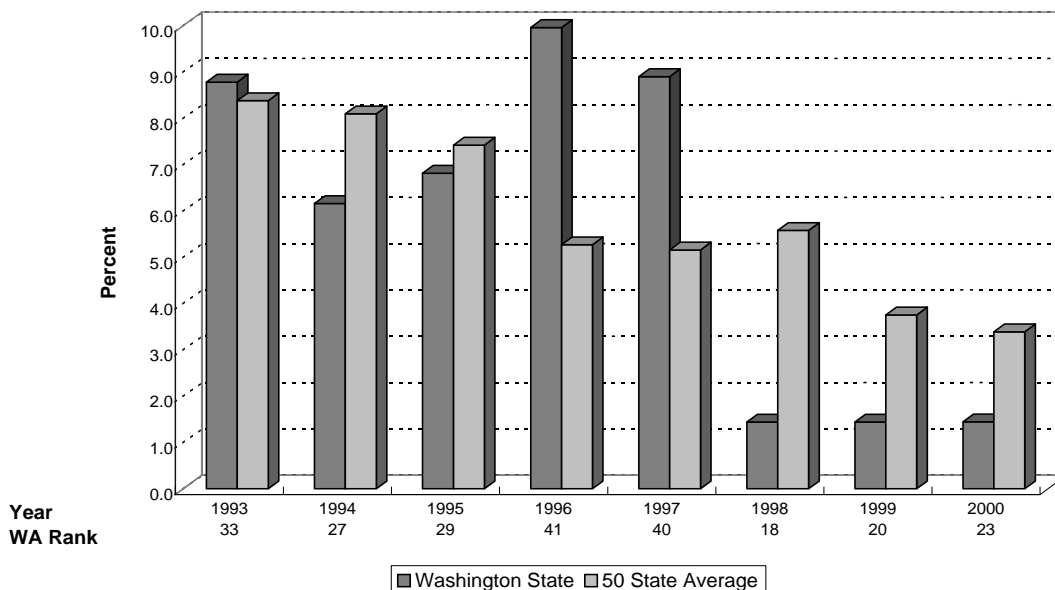


Table 34  
Infrastructure  
**Interstate Miles in Poor Condition**  
(Percent)

	1996	1997	1998	1999	2000	1996-2000
Alabama	0.6	0.6	0.6	1.1	1.1	0.8
Alaska	9.4	9.1	8.0	4.3	0.1	6.2
Arizona	0.3	0.6	1.4	0.2	0.1	0.5
Arkansas	29.7	28.7	39.1	30.7	26.3	30.9
California	10.1	10.9	10.8	10.7	13.6	11.2
Colorado	21.0	17.6	12.7	0.5	0.0	10.4
Connecticut	9.3	7.2	6.3	6.9	5.8	7.1
Delaware	29.3	29.3	29.3	28.2	28.2	28.8
Florida	1.1	0.2	0.0	0.6	0.8	0.5
Georgia	0.0	0.0	0.0	0.2	0.0	0.0
Hawaii*	NA	NA	NA	NA	NA	NA
Idaho	2.9	1.5	1.5	2.1	2.3	2.1
Illinois**	4.9	4.3	NA	2.5	2.3	3.5
Indiana	4.1	3.5	1.1	0.5	0.5	1.9
Iowa	2.6	2.4	2.8	2.8	2.0	2.5
Kansas	0.0	2.0	0.8	0.8	0.2	0.8
Kentucky	1.0	0.8	1.2	2.0	1.6	1.3
Louisiana	4.9	8.4	14.2	12.9	9.3	9.9
Maine	0.0	0.0	0.0	0.0	0.3	0.1
Maryland	4.8	4.4	5.4	4.0	3.9	4.5
Massachusetts	2.3	1.8	0.9	1.4	1.1	1.5
Michigan	5.2	5.2	11.3	7.9	7.8	7.5
Minnesota	5.4	2.6	6.7	0.3	0.0	3.0
Mississippi	5.8	6.0	5.5	4.7	4.7	5.3
Missouri	1.5	3.5	3.8	3.4	4.1	3.3
Montana	4.2	0.9	0.9	1.1	1.1	1.6
Nebraska	0.2	5.0	6.2	2.3	7.7	4.3
Nevada	3.9	5.4	5.3	1.6	1.6	3.6
New Hampshire	0.0	0.0	0.4	0.4	0.0	0.2
New Jersey	12.9	32.7	32.7	7.1	6.6	18.4
New Mexico	4.6	12.7	3.7	5.4	3.7	6.0
New York	12.5	12.2	12.3	16.6	12.0	13.1
North Carolina	19.3	16.3	14.3	6.7	5.5	12.4
North Dakota	5.1	0.0	0.0	0.0	0.0	1.0
Ohio	1.2	0.6	0.3	1.1	0.6	0.8
Oklahoma	11.1	6.8	6.8	7.1	7.1	7.8
Oregon	0.5	0.1	43.1	0.1	0.0	8.8
Pennsylvania	9.1	7.4	1.5	3.5	2.3	4.8
Rhode Island	5.0	0.0	1.5	1.4	1.5	1.9
South Carolina	0.1	0.1	0.4	1.3	0.1	0.4
South Dakota	5.3	8.0	6.4	3.0	3.2	5.2
Tennessee	3.9	3.9	2.5	0.9	0.6	2.4
Texas	0.5	0.6	0.7	0.6	0.8	0.6
Utah	0.0	0.0	3.2	2.0	2.0	1.5
Vermont	0.0	0.0	0.0	2.8	2.2	1.0
Virginia	1.9	1.9	2.1	1.8	0.9	1.7
<b>Washington</b>	<b>10.0</b>	<b>8.9</b>	<b>1.4</b>	<b>1.4</b>	<b>1.4</b>	<b>4.6</b>
West Virginia	7.6	1.8	1.6	5.3	5.3	4.3
Wisconsin	3.4	3.2	3.9	1.5	0.0	2.4
Wyoming	0.1	0.1	0.1	0.2	0.1	0.1
U.S. Average	5.3	5.2	5.6	3.8	3.4	4.6
<b>Washington's Rank</b>	<b>41</b>	<b>40</b>	<b>18</b>	<b>20</b>	<b>23</b>	<b>32</b>

\*The FHWA has recently found that between 1993 and 2000, the state of Hawaii did not use the International Roughness Index as an indicator of pavement conditions and instead used a system of measurement not up to FHWA standards. Their source was also unable to be verified and as a result, the FHWA has recalled the figures for Hawaii between 1993 and 2000.

\*\*Illinois has chosen to withhold their 1998 figures.

Source: Highway Statistics, 1993-2000. Table Hm-64, Federal Highway Administration. ([www.fhwa.dot.gov](http://www.fhwa.dot.gov))



# Urban Roadway Congestion Index

The Urban Roadway Congestion Index (RCI) is a traffic density indicator calculated as a ratio of daily traffic volume to the optimum volume for a given road system. The index is calculated by the Texas Department of Transportation. It includes a sample of 50 urban areas selected to represent those areas with populations greater than 800,000 or those with a significant amount of congestion. Ultimately, the RCI measures both the intensity and duration of congestion. An RCI greater than or equal to 1 indicates that congestion exists throughout the area.

The costs of congestion result in economic inefficiency as travelers waste fuel and incur the opportunity cost of extra travel time. In 1982, the average annual delay per person was only 16 hours but this has increased to 62 hours in 2000. The congestion “bill” for the selected areas of the study totaled \$67.5 billion in 2000, which was the value of 3.6 billion hours of delay and 5.7 billion gallons of excess fuel consumed. Furthermore, the RCI average for 2000 was 1.13; the highest average since the index was first calculated.

In 2000, the Seattle-Everett region had an RCI of 1.27, down from its 1999 RCI of 1.30. The region has consistently ranked as the 5<sup>th</sup> or 6<sup>th</sup> most congested since 1992, however in 2000 it ranked 16<sup>th</sup>. For the period from 1996-2000, the region’s average RCI of 1.25 ranked as the 7<sup>th</sup> most congested of the urban areas reported in this publication.

Chart 35  
Urban Roadway Congestion Index

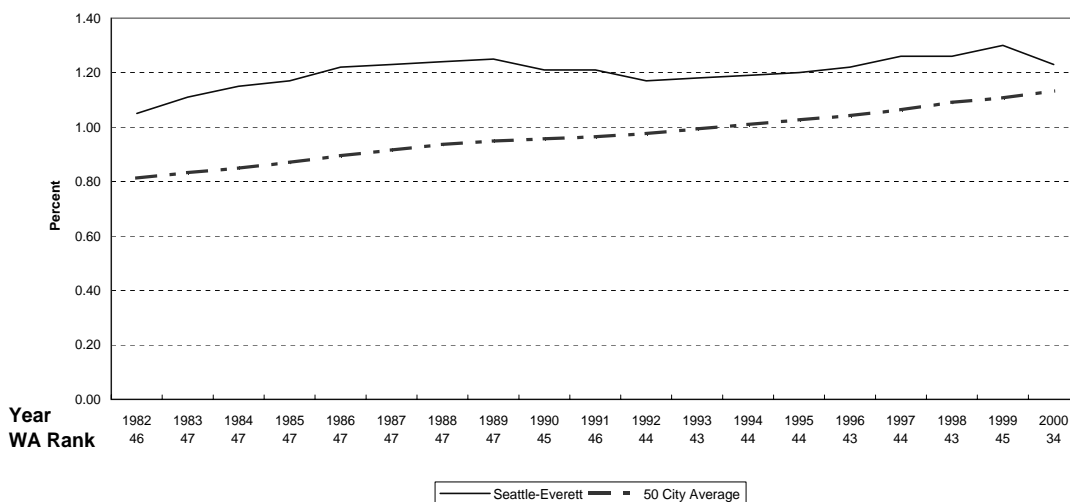


Table 35  
Infrastructure  
**Urban Roadway Congestion Index**  
(Values greater than 1 indicate congestion)

	1996	1997	1998	1999	2000	1996-00
Albuquerque NM	1.01	1.05	1.12	1.13	1.09	1.08
Atlanta GA	1.17	1.23	1.28	1.27	1.32	1.25
Austin TX	0.96	1.03	1.04	1.06	1.11	1.04
Baltimore MD	1.04	1.05	1.06	1.07	1.10	1.06
Boston MA	1.22	1.24	1.27	1.28	1.30	1.26
Charlotte NC	0.97	1.04	1.09	1.14	1.15	1.08
Chicago IL-Northwestern IN	1.26	1.28	1.31	1.31	1.31	1.29
Cincinnati OH-KY	1.02	1.08	1.11	1.12	1.13	1.09
Cleveland OH	0.99	1.01	0.98	0.99	0.97	0.99
Columbus OH	1.00	1.04	1.05	1.05	1.02	1.03
Corpus Christi TX	0.67	0.72	0.70	0.71	1.10	0.78
Dallas-Ft. Worth TX	0.98	1.01	1.07	1.07	1.10	1.05
Denver CO	1.07	1.08	1.18	1.20	1.23	1.15
Detroit MI	1.15	1.18	1.18	1.20	1.22	1.19
El Paso TX-NM	0.83	0.86	0.91	0.94	0.98	0.90
Ft. Lauderdale-Hllywd-Pompano Beach FL	1.04	1.08	1.12	1.17	1.23	1.13
Hartford-Middletown CT	0.88	0.90	0.91	0.94	0.97	0.92
Honolulu HI	1.07	1.06	1.06	1.06	1.04	1.06
Houston TX	1.02	1.07	1.10	1.10	1.09	1.08
Indianapolis IN	1.00	1.05	1.12	1.11	1.13	1.08
Jacksonville FL	0.92	0.93	1.01	1.00	1.02	0.98
Kansas City MO-KS	0.75	0.76	0.77	0.79	0.81	0.78
Los Angeles CA	1.54	1.51	1.58	1.58	1.59	1.56
Louisville KY	1.02	1.04	1.08	1.09	1.09	1.06
Memphis TN-AR-MS	0.95	0.96	0.99	0.98	1.00	0.98
Miami-Hialeah FL	1.22	1.26	1.22	1.23	1.28	1.24
Milwaukee WI	1.01	1.01	1.02	1.05	1.08	1.03
Minn-St. Paul MN	1.08	1.13	1.18	1.20	1.22	1.16
Nashville TN	0.92	0.96	0.97	1.01	0.98	0.97
New Orleans LA	0.99	0.99	1.00	0.99	0.97	0.99
New York NY-Northeastern NJ	1.06	1.11	1.14	1.15	1.16	1.12
Norfolk VA	0.97	0.97	0.96	0.97	0.96	0.97
Oklahoma City OK	0.84	0.85	0.86	0.88	0.87	0.86
Orlando FL	0.87	0.93	1.05	1.05	1.11	1.00
Philadelphia PA-NJ	1.03	1.05	1.05	1.06	1.10	1.06
Phoenix AZ	1.11	1.13	1.16	1.21	1.27	1.18
Pittsburgh PA	0.76	0.76	0.78	0.78	0.77	0.77
Portland-Vancouver OR-WA	1.20	1.22	1.22	1.24	1.27	1.23
Sacramento CA	1.15	1.14	1.18	1.20	1.25	1.18
Salt Lake City UT	1.05	1.04	1.01	1.00	0.97	1.01
San Antonio TX	0.89	0.92	0.96	1.02	1.05	0.97
San Bernardino-Riv CA	1.17	1.15	1.20	1.24	1.26	1.20
San Diego CA	1.14	1.12	1.19	1.25	1.32	1.20
San Fran-Oak CA	1.36	1.33	1.37	1.39	1.45	1.38
San Jose CA	1.08	1.08	1.13	1.19	1.34	1.16
<b>Seattle-Everett WA</b>	<b>1.22</b>	<b>1.26</b>	<b>1.26</b>	<b>1.30</b>	<b>1.23</b>	<b>1.25</b>
St. Louis MO-II	1.01	1.03	1.01	1.03	1.03	1.02
Tampa FL	1.09	1.07	1.08	1.10	1.13	1.09
Washington DC-MD-VA	1.32	1.33	1.35	1.34	1.35	1.34
49 City Average	1.04	1.06	1.09	1.11	1.13	1.09
<b>Washington's Rank</b>	<b>43</b>	<b>44</b>	<b>43</b>	<b>45</b>	<b>34</b>	<b>43</b>

# FAA Air Traffic Delays

The FAA's annual Air Traffic Activity and Delay Report provides air traffic information for the 55 largest airports. Air traffic delays can occur at any phase of the flight and are characterized as delays that exceed 15 minutes. For comparison purposes, the report states the number of delays per 1000 operations.

In 2001, the Seattle-Tacoma airport ranked 43<sup>rd</sup> among the 55 largest airports with 20.8 delays per 1000 operations, above the airports' average of 16.7 delays per 1000 operations. While the Seattle-Tacoma airport ranked 38<sup>th</sup> among the airports for the period 1997-2001, its average of 12.8 delays per 1000 operations for that period was below the average value for the airports, which was 16.1.

Chart 36  
FAA Air Traffic Delays



Table 36  
Infrastructure  
**FAA Air Traffic Delays**  
Delays Per 1000 Operations

	1997	1998	1999	2000	2001	1997-01
Albuquerque	0.5	0.5	0.4	0.7	0.1	0.4
Anchorage	0.3	0.8	1.2	0.7	1.2	0.9
Andrews AFB	1.7	1.4	1.9	1.3	1.2	1.5
Atlanta Hartsfield	31.8	33.1	36.0	30.9	24.3	31.2
Baltimore-Washington	1.8	2.6	5.2	6.9	5.1	4.3
Boston Logan	25.1	31.8	29.8	47.5	34.5	33.7
Bradley International	1.2	1.2	2.0	3.0	3.8	2.3
Charlotte Douglas	5.7	3.6	2.9	6.0	5.2	4.7
Chicago Midway	3.4	5.1	9.7	11.9	8.1	7.6
Chicago O'Hare	23.5	32.1	54.8	63.3	59.5	46.6
Cincinnati Tower	11.9	15.4	17.6	15.4	10.2	14.1
Cleveland Hopkins	5.7	6.3	10.9	11.4	6.4	8.1
Dallas/Ft. Worth	14.6	11.5	19.3	23.8	22.0	18.2
Dayton Cox	0.3	1.3	1.5	1.1	1.5	1.1
Denver Stapleton	2.9	1.7	2.5	2.2	3.7	2.6
Detroit Metro	8.3	9.4	20.6	17.6	15.5	14.3
Fairbanks	0.1	0.0	0.1	0.1	0.0	0.1
Ft. Lauderdale	2.0	2.1	2.7	3.7	5.3	3.2
Honolulu	0.3	0.1	0.1	0.0	0.1	0.1
Houston Hobby	3.3	3.4	4.4	2.5	4.3	3.6
Houston Intercontinental	12.9	22.2	20.6	28.1	33.0	23.4
Indianapolis	1.9	0.4	0.7	0.9	0.6	0.9
Kahului/Maui	0.1	0.0	0.0	0.0	0.1	0.0
Kansas City	1.4	0.9	1.1	1.1	1.0	1.1
Las Vegas McCarran	4.1	6.3	7.1	8.0	5.4	6.2
Los Angeles	17.7	9.7	13.7	21.9	22.6	17.1
Memphis	1.4	0.8	0.8	0.4	0.9	0.9
Miami	6.8	6.3	8.2	11.3	11.3	8.8
Minneapolis-St. Paul	6.6	7.2	17.2	12.7	14.5	11.7
Nashville	0.4	0.6	0.6	0.6	0.3	0.5
New Orleans Moisant	0.6	0.6	1.1	0.8	0.9	0.8
New York Kennedy	18.3	36.3	38.1	38.8	24.6	31.2
New York La Guardia	49.0	68.4	77.3	155.9	77.0	85.5
Newark	57.8	69.1	78.9	81.2	60.3	69.5
Ontario	1.8	1.2	0.7	1.2	1.8	1.4
Orlando	4.2	5.9	6.3	6.3	4.0	5.3
Palm Beach	0.6	0.5	0.5	2.1	2.0	1.1
Philadelphia	16.2	24.6	30.2	44.5	40.5	31.2
Phoenix Sky Harbor	9.1	19.9	21.1	21.9	15.3	17.5
Pittsburgh	2.8	3.6	2.1	3.8	2.7	3.0
Portland	3.0	1.1	1.5	0.5	0.3	1.3
Raleigh-Durham	0.7	0.6	1.3	2.1	1.5	1.2
Salt Lake City	2.6	2.8	1.9	2.0	2.3	2.3
San Antonio	0.7	0.7	1.2	0.8	0.3	0.7
San Diego Lindbergh	2.2	4.1	3.8	2.5	4.9	3.5
San Francisco	43.0	65.7	48.1	56.9	38.3	50.4
San Jose	0.5	1.6	2.2	5.7	6.3	3.3
San Juan	3.0	2.0	0.6	0.2	0.8	1.3
<b>Seattle-Tacoma</b>	<b>7.1</b>	<b>7.5</b>	<b>18.4</b>	<b>10.4</b>	<b>20.8</b>	<b>12.8</b>
St. Louis Lambert	30.4	31.7	19.2	18.2	18.1	23.5
Tampa	3.0	3.7	2.3	1.6	2.8	2.7
Teterboro	12.5	21.3	17.5	19.0	25.3	19.1
Washington Dulles	5.9	12.1	19.1	19.4	8.0	12.9
Washington National	4.3	5.9	6.6	8.0	10.6	7.1
Westchester Co.	1.9	3.0	2.5	3.5	8.6	3.9
U.S. Major Airport Avg.	11.9	14.6	17.1	20.4	16.7	16.1
<b>Seattle-Tacoma Rank*</b>	<b>39</b>	<b>38</b>	<b>41</b>	<b>34</b>	<b>43</b>	<b>38</b>

\* Out of the 55 largest airports

Source: FAA Air Traffic System Management, Air Traffic Activity and Delay Report, December 1990-2001.

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# **Cost of Doing Business**

# State and Local Tax Collections Per \$1000 Personal Income

The relative tax position of Washington is of considerable interest to taxpayers and government officials alike. The Census Bureau of the U.S. Department of Commerce annually collects data in order to compare tax burdens across states. Using this figure, tax burdens are then calculated using several different methods; this report compares tax collections per \$1000 personal income. This measure is computed by dividing the total state and local taxes by total state personal income.

In fiscal year 1999, Washington's state and local tax burden amounted to \$111.25 for each \$1,000 of personal income. This is the fourth year of continuous decline in the Washington's state and local tax burden relative to personal income, bringing this benchmark to its lowest level in over a decade. In 1999, Washington's tax burden ranked 31<sup>st</sup> among the states and was just 77 cents above the national average of \$110.48 per \$1,000 of personal income.

The decrease in Washington's state and local tax burdens is expected to continue with the elimination of the motor vehicle excise tax (MVET), effective January 1, 2000. The impact of this tax cut will reflect in the tax burden data of the second half of fiscal year 2000.

## Initial Incidence of State and local Taxes

The "initial incidence" of a tax refers to the party from whom the tax is collected. Initial incidence does not always indicate who actually bears the tax burden, because taxes initially paid by business may sometimes be recovered in the form of higher prices or lower wages, shifting the tax burden to consumers or workers.

The Washington Department of Revenue estimates that in fiscal year 2000, businesses directly paid 45% of major state and local taxes, governments paid 4% and households paid 51%.

Chart 37

State and Local Tax Collections per \$1,000 Personal Income

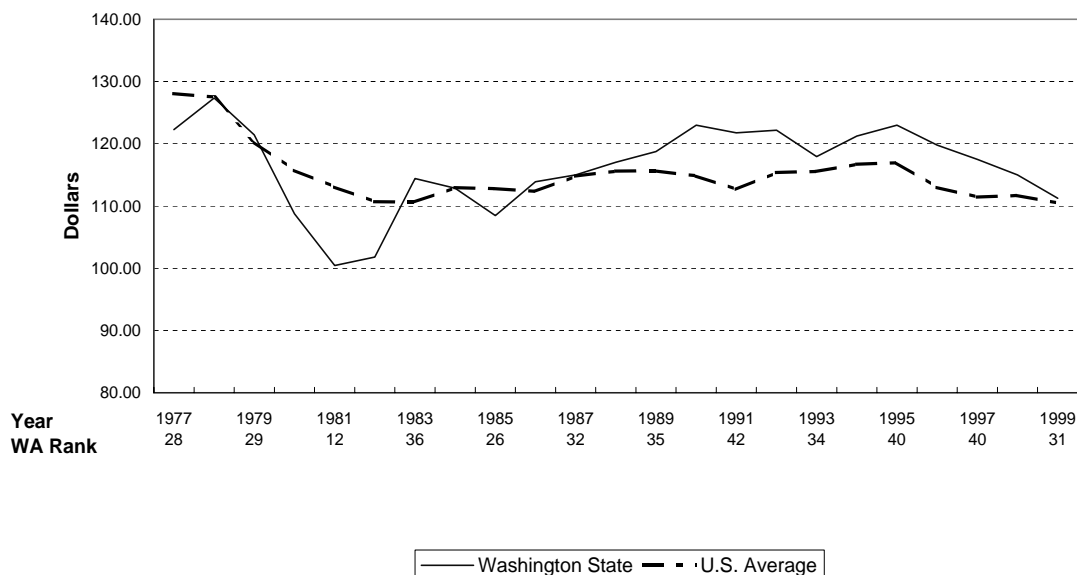


Table 37  
Cost of Doing Business  
**State and Local Tax Collections Per \$1,000 Personal Income**  
(Dollars)

	1995	1996	1997	1998	1999	1995-99
Alabama	96.34	93.55	91.24	91.33	91.11	92.71
Alaska	189.92	158.85	153.00	122.29	102.62	145.34
Arizona	123.84	117.59	108.83	106.77	108.65	113.14
Arkansas	106.27	107.89	105.14	106.51	112.62	107.69
California	115.56	113.38	111.42	114.50	113.58	113.69
Colorado	107.13	102.97	100.99	100.87	102.24	102.84
Connecticut	126.95	120.54	125.64	124.52	121.48	123.83
Delaware	119.26	108.60	111.30	118.84	112.34	114.07
Florida	105.62	102.73	100.34	100.50	100.24	101.89
Georgia	111.91	110.56	105.07	106.15	107.74	108.29
Hawaii	128.10	131.63	126.63	125.89	123.01	127.05
Idaho	115.00	115.58	112.48	113.76	112.63	113.89
Illinois	111.67	109.44	106.07	104.66	104.95	107.36
Indiana	109.59	104.35	110.80	105.75	104.70	107.04
Iowa	122.75	117.45	111.22	109.80	107.95	113.83
Kansas	114.61	113.74	112.57	115.74	107.59	112.85
Kentucky	119.36	115.63	113.73	112.84	110.99	114.51
Louisiana	105.03	102.71	109.58	109.02	108.02	106.87
Maine	126.67	129.48	134.47	144.46	139.08	134.83
Maryland	111.79	106.43	105.38	107.86	104.63	107.22
Massachusetts	117.00	112.37	111.63	113.28	108.53	112.56
Michigan	111.28	108.72	111.79	112.75	113.60	111.63
Minnesota	135.88	131.86	128.86	127.69	123.26	129.51
Mississippi	113.65	114.30	109.65	109.73	110.54	111.57
Missouri	105.37	100.62	101.58	101.57	101.56	102.14
Montana	116.19	111.02	113.65	113.78	108.85	112.70
Nebraska	116.14	118.92	113.39	112.36	107.66	113.69
Nevada	113.18	114.31	105.41	100.82	101.79	107.10
New Hampshire	96.68	89.13	91.03	88.39	88.37	90.72
New Jersey	119.02	115.74	111.10	115.10	113.68	114.93
New Mexico	128.51	126.36	127.72	131.39	121.73	127.14
New York	152.55	144.42	142.13	141.92	140.34	144.27
North Carolina	114.87	108.58	105.83	107.40	105.52	108.44
North Dakota	117.81	120.65	116.05	122.02	114.89	118.28
Ohio	115.69	111.38	110.03	110.35	109.86	111.46
Oklahoma	110.61	107.69	107.50	107.17	104.78	107.55
Oregon	114.82	106.65	106.75	100.96	100.19	105.87
Pennsylvania	111.77	106.47	106.62	107.27	107.18	107.86
Rhode Island	120.39	114.85	117.49	117.15	115.56	117.09
South Carolina	108.78	105.01	102.28	103.50	104.75	104.86
South Dakota	98.58	100.80	92.15	97.80	95.06	96.88
Tennessee	93.51	90.36	89.08	90.01	87.99	90.19
Texas	106.76	102.51	101.61	98.71	96.79	101.28
Utah	122.60	120.68	115.91	118.15	116.78	118.82
Vermont	123.82	122.25	123.74	125.08	121.82	123.34
Virginia	103.58	98.48	99.03	100.81	101.64	100.71
<b>Washington</b>	<b>123.00</b>	<b>119.79</b>	<b>117.49</b>	<b>115.00</b>	<b>111.25</b>	<b>117.31</b>
West Virginia	114.74	112.66	114.07	112.30	116.65	114.08
Wisconsin	136.66	133.33	128.22	129.10	127.08	130.88
Wyoming	116.70	117.28	116.93	122.04	113.41	117.27
U.S. Average	116.94	112.99	111.43	111.70	110.48	112.71
<b>Washington's Rank</b>	<b>40</b>	<b>39</b>	<b>40</b>	<b>34</b>	<b>31</b>	<b>39</b>

Source: Washington State Department of Revenue. Comparative State/Local Taxes, 1977-1999. ([www.dor.wa.gov](http://www.dor.wa.gov))



# Unemployment Insurance Costs

Unemployment insurance programs are designed to provide economic security against the effects of unemployment. Unemployment insurance provides temporary compensation to most workers who are out of work due to no fault of their own.

Unemployment insurance is provided by a combined Federal-State system, primarily financed through a payroll tax on employers. Under this system, the Federal Government sets minimum standards of eligibility and benefits that the states are free to exceed. As a result, there is a wide degree of variation in the eligibility for and benefits paid under the unemployment insurance programs of different states, as well as variation in the number of employers that pay into the programs.

In 2001, Washington had the third highest unemployment insurance cost as a percent of total wages in the country with an average rate of 1.17 percent. The national average rate for the same year was 0.51 percent. Washington, however, has one of the most generous unemployment insurance programs in the country in terms of benefits, eligibility, and duration. While the increased benefits come at a cost, they provide increased security to workers and help insulate local economies from large swings in income and spending when layoffs occur in localized industries. The optimum level of benefits relative to the costs of providing them is a subject of continuous debate.

Chart 38  
Unemployment Insurance Costs

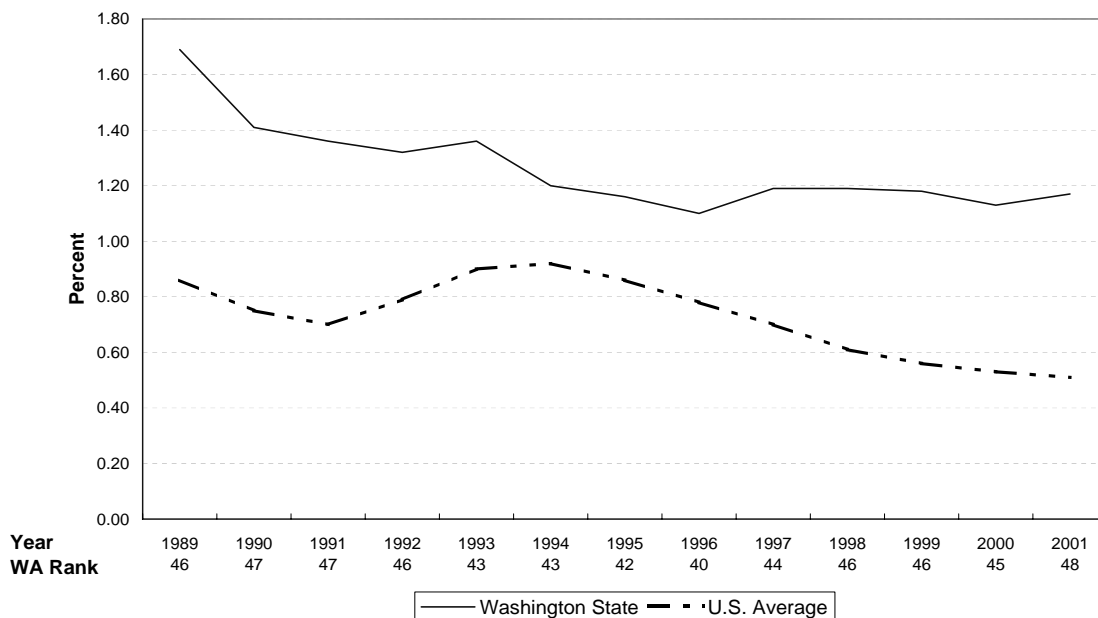


Table 38  
Cost of Doing Business  
**Unemployment Insurance Costs**  
(Contributions collected as percent of total wages)

	1997	1998	1999	2000	2001	1997-2001
Alabama	0.34	0.45	0.36	0.34	0.39	0.38
Alaska	1.88	1.63	1.59	1.75	1.64	1.70
Arizona	0.47	0.38	0.31	0.29	0.23	0.34
Arkansas	0.83	0.81	0.76	0.72	0.65	0.75
California	0.68	0.67	0.57	0.53	0.53	0.60
Colorado	0.38	0.33	0.32	0.27	0.26	0.31
Connecticut	1.19	1.10	0.62	0.49	0.43	0.77
Delaware	0.68	0.56	0.55	0.48	0.41	0.54
Florida	0.45	0.32	0.36	0.22	0.30	0.33
Georgia	0.37	0.30	0.14	0.14	0.14	0.22
Hawaii	1.33	1.25	1.21	1.15	0.79	1.15
Idaho	0.92	0.77	0.77	0.76	0.80	0.80
Illinois	0.73	0.68	0.64	0.57	0.52	0.63
Indiana	0.39	0.32	0.38	0.37	0.27	0.35
Iowa	0.50	0.50	0.51	0.64	0.64	0.56
Kansas	0.13	0.13	0.13	0.43	0.49	0.26
Kentucky	0.72	0.68	0.59	0.59	0.50	0.62
Louisiana	0.54	0.48	0.43	0.38	0.42	0.45
Maine	1.03	1.13	1.10	1.15	1.17	1.12
Maryland	0.54	0.48	0.46	0.40	0.36	0.45
Massachusetts	1.30	0.94	0.72	0.68	0.66	0.86
Michigan	0.97	0.80	0.75	0.73	0.71	0.79
Minnesota	0.61	0.55	0.51	0.46	0.43	0.51
Mississippi	0.43	0.50	0.57	0.50	0.42	0.48
Missouri	0.61	0.55	0.41	0.34	0.34	0.45
Montana	0.86	0.86	0.87	0.70	0.71	0.80
Nebraska	0.34	0.14	0.18	0.23	0.28	0.23
Nevada	0.84	0.81	0.82	0.76	0.76	0.80
New Hampshire	0.20	0.20	0.20	0.20	0.20	0.20
New Jersey	1.15	0.92	0.84	0.87	0.91	0.94
New Mexico	0.74	0.75	0.60	0.60	0.46	0.63
New York	0.84	0.61	0.59	0.65	0.59	0.66
North Carolina	0.31	0.35	0.35	0.28	0.31	0.32
North Dakota	0.46	0.59	0.61	0.69	0.69	0.61
Ohio	0.54	0.51	0.47	0.44	0.42	0.48
Oklahoma	0.32	0.17	0.19	0.15	0.17	0.20
Oregon	1.23	1.24	1.26	1.21	1.06	1.20
Pennsylvania	1.13	1.07	1.01	0.96	0.92	1.02
Rhode Island	2.00	1.85	1.47	1.24	1.14	1.54
South Carolina	0.60	0.42	0.42	0.41	0.39	0.45
South Dakota	0.21	0.21	0.20	0.20	0.19	0.20
Tennessee	0.46	0.46	0.42	0.42	0.40	0.43
Texas	0.47	0.43	0.37	0.37	0.33	0.39
Utah	0.42	0.36	0.34	0.24	0.27	0.33
Vermont	0.89	0.85	0.82	0.75	0.61	0.78
Virginia	0.26	0.17	0.16	0.15	0.15	0.18
<b>Washington</b>	<b>1.19</b>	<b>1.19</b>	<b>1.18</b>	<b>1.13</b>	<b>1.17</b>	<b>1.17</b>
West Virginia	1.03	1.01	0.98	0.97	0.94	0.99
Wisconsin	0.74	0.68	0.67	0.65	0.63	0.67
Wyoming	0.75	0.74	0.70	0.65	0.58	0.68
U.S. Average	0.70	0.61	0.56	0.53	0.51	0.58
<b>Washington's Rank</b>	<b>44</b>	<b>46</b>	<b>46</b>	<b>45</b>	<b>48</b>	<b>47</b>

Source: U.S. Department of Labor, Employment and Training Administration

# Workers' Compensation Premium Costs

(Updated data not released in time for publication)

The Oregon Department of Consumer & Business Services produces the workers' compensation premium index every two years in order to make a state-by-state comparison of workers' compensation premiums. The premium index is calculated by selecting Oregon's fifty largest business classes as defined by the workers' compensation costs and computing what those compensation claims would cost in other states.

In 2000, Washington's premium costs for the industries examined by the studies were \$1.77 per \$100 of payroll. This is the fifth consecutive decline in Washington's premium costs and a decline of \$2.15 since 1990, which is over 50 cents more than the nation's decline. Washington ranked 14<sup>th</sup> in 2000, a considerable improvement since its rank of 29<sup>th</sup> a decade earlier.

Washington's compensation system is atypical of other states' systems as employees pay a portion of their industrial premiums into a state fund and the Department of Labor and Industries acts as both the insurer and administrator of the workers' compensation system. When compared to the other states employing sole provider state models for workers' compensation activities, Washington ranked 2<sup>nd</sup>. Washington's results over the past decade suggest an effective and successful workers' compensation system.

Chart 39  
Workers' Compensation Premium Cost Index

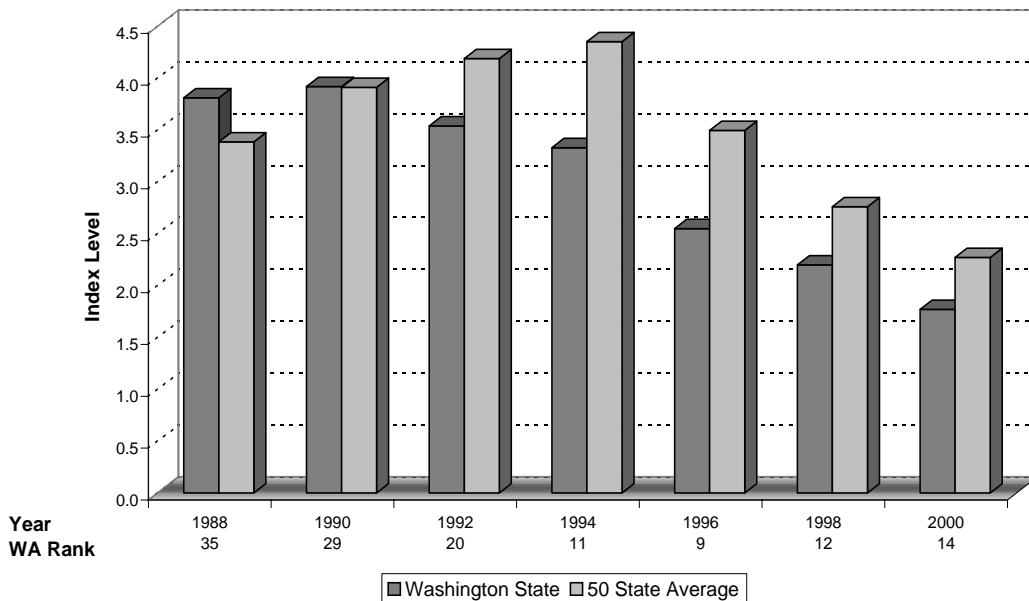


Table 39  
Cost of Doing Business  
**Workers' Compensation Premium Costs**  
(Dollar amount per \$100 of payroll)

	1992	1994	1996	1998	2000	1992-00
Alabama	5.04	4.78	3.64	3.70	2.56	3.94
Alaska	4.35	3.92	3.41	2.70	2.18	3.31
Arizona	4.34	4.18	3.38	2.60	1.77	3.25
Arkansas	4.04	3.69	3.04	2.29	1.68	2.95
California	5.96	5.04	4.11	4.86	3.34	4.66
Colorado	6.60	5.28	3.34	2.87	2.64	4.15
Connecticut	6.21	5.34	4.64	3.67	2.58	4.49
Delaware	3.35	3.18	3.54	3.20	2.58	3.17
Florida	6.22	5.72	5.26	4.28	4.08	5.11
Georgia	4.77	4.52	4.04	2.95	2.42	3.74
Hawaii	5.52	6.06	5.75	3.24	2.99	4.71
Idaho	3.90	3.88	3.00	2.48	2.11	3.07
Illinois	5.03	5.48	3.77	2.96	2.62	3.97
Indiana	2.29	2.26	1.71	1.55	1.32	1.83
Iowa	3.37	3.47	2.17	1.87	1.66	2.51
Kansas	3.10	3.49	2.64	1.82	1.56	2.52
Kentucky	4.04	5.46	3.77	2.58	2.32	3.63
Louisiana	4.96	6.98	5.47	4.06	3.36	4.97
Maine	5.05	5.87	3.91	2.69	2.52	4.01
Maryland	2.86	3.08	2.23	2.03	1.58	2.36
Massachusetts	5.40	4.98	3.71	3.10	1.77	3.79
Michigan	4.75	4.54	3.05	2.86	2.40	3.52
Minnesota	6.18	5.29	4.03	2.94	2.40	4.17
Mississippi	3.41	3.70	3.30	2.62	2.10	3.03
Missouri	3.63	4.35	3.45	2.65	2.26	3.27
Montana	6.34	6.91	4.71	3.50	2.75	4.84
Nebraska	2.92	3.31	2.04	1.62	1.62	2.30
Nevada	4.61	4.55	3.96	3.86	3.10	4.02
New Hampshire	4.40	4.73	4.13	3.32	2.47	3.81
New Jersey	3.13	3.58	3.20	2.49	2.19	2.92
New Mexico	4.63	5.75	3.55	2.43	1.66	3.60
New York	5.36	5.38	4.90	3.53	3.05	4.44
North Carolina	2.56	3.41	3.05	2.02	1.64	2.54
North Dakota	1.97	2.53	2.34	2.19	1.79	2.16
Ohio	3.83	4.42	4.12	3.12	2.89	3.68
Oklahoma	4.11	4.86	4.65	3.10	2.85	3.91
Oregon	4.41	3.70	3.15	2.27	1.93	3.09
Pennsylvania	4.60	5.02	4.37	2.69	2.31	3.80
Rhode Island	6.19	5.75	4.81	3.74	3.18	4.73
South Carolina	2.71	2.91	2.38	1.47	1.51	2.20
South Dakota	3.42	3.88	3.20	2.31	1.63	2.89
Tennessee	3.33	3.60	3.59	2.79	2.10	3.08
Texas	6.51	5.91	4.19	4.11	3.05	4.75
Utah	3.00	3.62	2.64	1.88	1.58	2.54
Vermont	3.11	4.21	3.60	2.41	1.98	3.06
Virginia	2.28	2.76	1.19	1.74	1.27	1.85
<b>Washington</b>	<b>3.54</b>	<b>3.33</b>	<b>2.55</b>	<b>2.20</b>	<b>1.77</b>	<b>2.68</b>
West Virginia	2.99	2.93	2.91	2.26	2.72	2.76
Wisconsin	3.02	3.17	2.34	2.36	2.01	2.58
Wyoming	2.12	2.84	2.85	2.05	1.75	2.32
50 State Average*	4.19	4.35	3.50	2.76	2.27	3.41
<b>Washington's Rank</b>	<b>20</b>	<b>11</b>	<b>9</b>	<b>12</b>	<b>14</b>	<b>13</b>

Source: Oregon Workers' Compensation Premium Rate Rankings, Calendar Year 1988, 1990, 1992, 1994, 1996, 1998, 2000.  
Research and Analysis Section of the Oregon Department of Consumer and Business Services.

# Electricity Prices

While many industrial and commercial operations rely on energy sources other than electricity, electrical power represents the main energy cost for most businesses. This indicator presents the average price of the commercial and industrial electricity purchases made annually in each state, expressed in cents per Kilowatts hour (kW-hr). To facilitate comparisons between states, each state is assumed to have had the same ratio of commercial to industrial sales as the U.S. had in each of the years indicated.

Due to the state's abundant hydrological resources, Washington has long enjoyed some of the lowest electricity prices in the country, ranking either 1<sup>st</sup> or 2<sup>nd</sup> in electricity prices among the states in the years 1990 through 1999. Deregulation difficulties in California and drought conditions over the entire West Coast, however, caused electricity prices in several western states to increase relative to the rest of the country in late 2000 and early 2001. As a result, Washington's rank decreased to 5<sup>th</sup> in 2000 and decreased further to 8<sup>th</sup> in 2001. In the period of 1997 through 2001, however, Washington's average price of 3.83 cents per kW-hr still ranked 3<sup>rd</sup> among the states and was well below the U.S. average of 5.87 cents. As these cost pressures have since lessened, Washington's electricity prices should ease relative to the other states' in future years.

Chart 40  
Electricity Costs

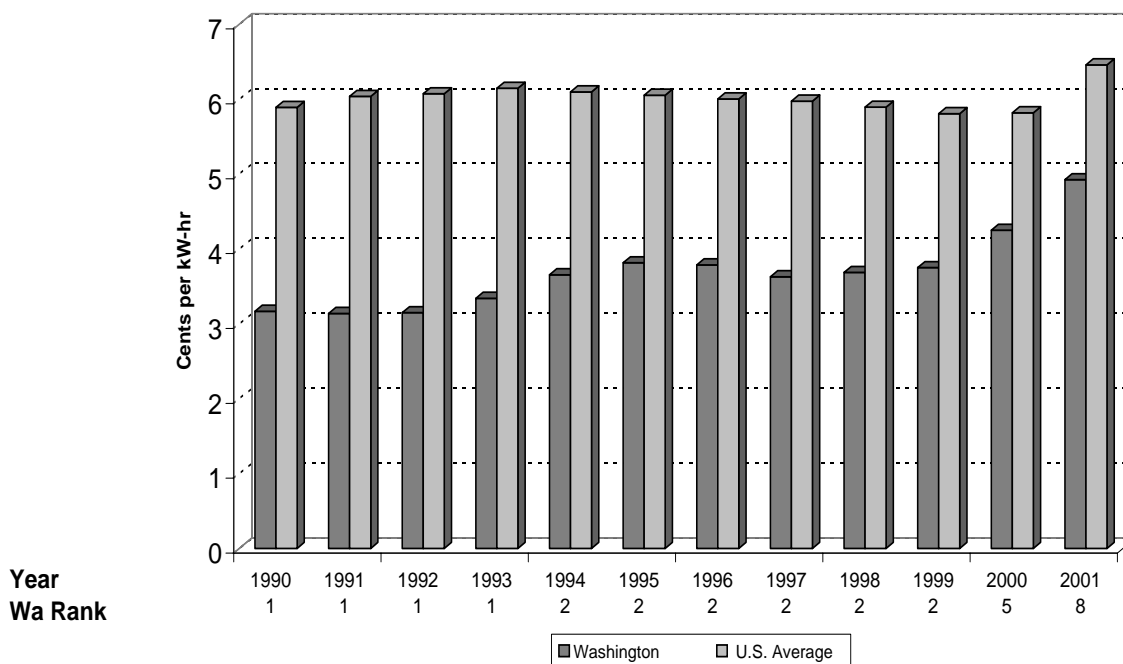


Table 40

## Cost of Doing Business

**Electricity Costs**

(Weighted average of industrial and commercial rates, Cents per KiloWatt Hour)

	1997	1998	1999	2000	2001	1997-2001
Alabama	4.95	5.17	5.14	5.28	5.27	5.14
Alaska	8.44	8.28	8.23	8.64	9.06	8.40
Arizona	6.36	6.39	6.24	6.17	6.36	6.29
Arkansas	5.55	5.00	4.95	5.07	5.39	5.14
California	8.38	8.07	8.57	7.41	10.20	8.11
Colorado	4.98	4.98	4.98	5.03	5.13	4.99
Connecticut	8.95	8.81	8.52	8.28	8.54	8.64
Delaware	5.94	5.82	6.02	5.69	6.15	5.87
Florida	5.79	5.57	5.48	5.57	6.24	5.60
Georgia	5.54	5.57	5.38	5.29	5.56	5.44
Hawaii	11.71	10.81	11.18	13.25	12.98	11.74
Idaho	3.34	3.53	3.45	3.69	4.44	3.50
Illinois	6.54	6.39	6.17	5.67	6.06	6.19
Indiana	4.92	4.98	4.94	4.81	4.95	4.91
Iowa	5.21	5.28	5.14	5.22	5.51	5.21
Kansas	5.44	5.37	5.34	5.36	5.44	5.37
Kentucky	3.98	4.06	4.10	4.02	4.10	4.04
Louisiana	5.62	5.31	5.39	6.16	6.60	5.62
Maine	8.26	8.40	8.41	8.47	9.26	8.39
Maryland	5.46	5.43	5.51	5.33	5.45	5.43
Massachusetts	9.49	8.74	8.31	8.58	10.23	8.78
Michigan	6.33	6.37	6.42	6.48	6.51	6.40
Minnesota	5.23	5.33	5.41	5.38	5.28	5.34
Mississippi	5.33	5.38	5.08	5.35	5.81	5.28
Missouri	5.19	5.18	5.15	5.17	5.24	5.17
Montana	4.67	4.48	4.55	4.40	6.12	4.52
Nebraska	4.48	4.49	4.48	4.50	4.75	4.49
Nevada	5.34	5.50	5.69	5.80	7.50	5.58
New Hampshire	10.14	10.49	10.27	10.25	9.88	10.29
New Jersey	9.17	8.98	8.69	7.67	8.82	8.63
New Mexico	6.07	6.08	5.85	5.85	6.50	5.96
New York	8.47	8.17	7.89	8.54	9.30	8.27
North Carolina	5.52	5.46	5.43	5.49	5.69	5.47
North Dakota	5.22	5.22	5.09	4.95	5.05	5.12
Ohio	5.82	5.93	5.95	6.01	6.32	5.93
Oklahoma	4.62	4.62	4.56	5.17	5.20	4.74
Oregon	4.05	4.22	4.23	4.24	4.84	4.18
Pennsylvania	7.08	6.90	6.52	5.29	6.96	6.45
Rhode Island	9.41	8.41	7.92	9.13	10.12	8.72
South Carolina	4.95	4.92	4.97	4.89	5.11	4.93
South Dakota	5.46	5.49	5.60	5.53	5.65	5.52
Tennessee	4.80	5.19	5.21	5.43	5.40	5.16
Texas	5.32	5.21	5.21	5.63	6.46	5.34
Utah	4.54	4.54	4.30	4.24	4.60	4.41
Vermont	8.80	8.64	8.96	8.94	9.58	8.84
Virginia	4.93	4.68	4.67	4.77	5.04	4.76
<b>Washington</b>	<b>3.63</b>	<b>3.69</b>	<b>3.75</b>	<b>4.25</b>	<b>4.93</b>	<b>3.83</b>
West Virginia	4.57	4.64	4.64	4.60	4.59	4.61
Wisconsin	4.61	4.83	4.86	5.00	5.40	4.82
Wyoming	4.31	4.28	4.28	4.34	4.55	4.31
U.S. Average	5.97	5.89	5.81	5.82	6.46	5.87
<b>WA Rank</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>8</b>	<b>3</b>

Source: U.S. Energy Information Administration (<http://www.eia.doe.gov>), July 2002.

# Average Wage by Sector

The **Occupational Employment Statistics (OES)** program, produced by the U.S. Department of Labor, Bureau of Labor Statistics, conducts a yearly mail survey designed to produce estimates of employment and wages for specific occupations in states and metropolitan areas. The OES program collects data on wage and salary workers in nonfarm establishments in order to produce employment and wage estimates for over 800 occupations. Data from self-employed persons are not collected and are not included in the estimates. The most recent year of wage data available under this program is 2000.

Under the OES program, occupations are classified under the Standard Occupational Classification (SOC) system. This system includes twenty-two major occupational groups, which can be broken down into 821 specific occupations. State wages for the major groups are presented in Table 39, while wages for the 821 specific occupations can be found at the BLS web site ([www.bls.gov](http://www.bls.gov)).

As compared to the other states, Washington's wages range in rank from 22<sup>nd</sup> in Farming, Fishing, and Forestry to 3<sup>rd</sup> in Healthcare Practitioners and Technical, Personal Care and Service, and Transportation and Material Moving. Overall, however, Washington wages are higher than the national average for all major groups, and in the top ten of all but four.

While information on average state wage levels alone can be useful in some business decisions, care must be taken in using them to analyze actual business costs. This is because the OES survey does not attempt to account for differences in productivity or industry mix between the states. A higher-than-average wage level may simply indicate a larger concentration of high-productivity jobs within an occupational group, or higher productivity levels in the same occupation due to differences in average state levels of capital or training. For example, Washington's high average wage in Healthcare Practitioners and Technical may be due to a higher-than-average number of higher-paid workers in biotechnology labs rather than having higher paid doctors and nurses. There are also considerable differences in wage levels between different parts of the state, with the highly populated areas affecting the average wage more than more sparsely populated areas that may have lower wages. The specific occupational and metropolitan area data available from the BLS can present a clearer picture of the range of labor costs in the states.

Table 41  
Cost of Doing Business  
Average Wages, 2000  
(Dollars)

	Management SOC 11-0000	Business and Financial Operations SOC 13-0000	Computer and Mathematical SOC 15-0000	Architecture and Engineering SOC 17-0000	Life, Physical and Social Science SOC 19-0000	Community and Social Services SOC 21-0000
Alabama	27.67	21.03	24.37	25.18	21.17	14.10
Alaska	30.55	24.77	24.19	29.66	23.56	16.46
Arizona	31.16	21.75	27.40	24.83	21.02	14.53
Arkansas	27.07	19.00	20.12	21.77	18.78	13.13
California	38.13	24.81	31.51	29.21	25.40	17.98
Colorado	34.17	23.31	29.61	26.67	22.58	16.30
Connecticut	39.36	26.91	29.25	26.82	26.64	18.33
Delaware	32.46	23.76	29.82	25.85	27.84	15.98
Florida	30.96	21.19	24.17	23.01	19.92	14.83
Georgia	33.09	22.94	27.07	24.37	21.22	15.62
Hawaii	31.23	22.22	24.62	25.44	21.14	16.51
Idaho	26.93	20.63	24.66	23.40	19.76	15.02
Illinois	31.83	22.79	27.85	24.79	21.90	15.20
Indiana	30.18	20.76	24.12	22.90	19.25	14.38
Iowa	27.22	19.40	24.40	22.33	19.02	13.43
Kansas	29.28	21.44	25.35	23.98	20.72	13.47
Kentucky	27.34	20.17	23.45	23.10	18.43	13.92
Louisiana	26.34	19.44	22.15	24.71	22.00	14.32
Maine	26.74	19.39	22.24	23.97	20.42	14.21
Maryland	32.26	23.78	28.77	26.47	26.08	15.74
Massachusetts	36.97	25.90	31.62	28.48	24.76	16.25
Michigan	37.33	25.19	26.32	28.40	20.90	18.25
Minnesota	35.39	22.30	27.83	25.20	24.29	15.43
Mississippi	25.57	18.73	19.87	20.72	19.04	14.35
Missouri	29.37	21.06	25.85	23.85	20.90	14.57
Montana	21.95	17.85	19.52	21.51	19.18	11.98
Nebraska	27.48	19.86	24.22	23.63	18.64	12.95
Nevada	31.73	21.15	21.69	23.91	19.07	18.66
New Hampshire	30.14	23.16	26.85	23.96	21.56	13.61
New Jersey	41.94	27.23	31.81	27.86	25.61	18.26
New Mexico	26.94	19.51	26.09	25.22	25.90	13.96
New York	41.25	27.91	29.82	27.08	26.16	17.81
North Carolina	30.50	22.01	28.54	23.89	21.62	14.22
North Dakota	23.81	18.68	18.72	19.82	18.60	13.17
Ohio	30.75	21.11	25.71	24.25	19.67	15.48
Oklahoma	25.77	19.40	20.12	22.81	19.54	12.41
Oregon	31.96	21.88	23.60	23.11	20.90	16.09
Pennsylvania	31.26	21.40	25.88	24.41	20.98	14.46
Rhode Island	35.35	23.65	23.46	25.53	21.98	16.84
South Carolina	26.41	19.01	23.28	25.48	20.13	13.35
South Dakota	29.75	17.89	16.78	20.09	15.69	13.95
Tennessee	27.52	21.22	23.13	23.09	21.24	13.21
Texas	30.54	22.62	28.15	27.59	22.79	15.95
Utah	28.52	20.31	21.53	22.17	18.26	13.63
Vermont	33.70	22.25	22.49	23.72	20.78	15.10
Virginia	33.92	24.33	28.59	26.42	24.36	16.56
<b>Washington</b>	<b>37.29</b>	<b>25.13</b>	<b>30.03</b>	<b>28.09</b>	<b>24.40</b>	<b>16.02</b>
West Virginia	24.11	18.56	22.08	21.77	19.73	11.30
Wisconsin	29.73	20.43	24.10	23.43	21.06	15.87
Wyoming	24.76	20.26	16.52	22.18	19.22	13.25
U.S. Average	32.78	23.30	27.91	25.99	22.97	15.82
<b>Washington's Rank</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>5</b>	<b>9</b>	<b>14</b>

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)), August 2002



Table 41 (cont.)  
Cost of Doing Business  
Average Wages, 2000  
(Dollars)

	Legal SOC 23-0000	Education, Training, and Library SOC 25-0000	Arts, Design, Entertainment, Sports, and Media SOC 27-0000	Healthcare Practitioners and Technical SOC 29-0000	Healthcare Support SOC 31-0000	Protective Service SOC 33-0000
Alabama	28.41	15.56	14.43	20.23	8.42	11.80
Alaska	34.38	19.99	16.03	27.27	13.84	17.96
Arizona	29.23	16.04	16.75	21.86	9.75	14.61
Arkansas	22.32	15.11	13.84	19.70	7.96	11.33
California	37.45	20.57	22.11	25.64	11.62	16.85
Colorado	27.14	17.65	19.03	22.99	11.27	16.19
Connecticut	37.88	20.95	20.88	27.47	12.63	16.21
Delaware	31.45	21.61	18.40	24.89	10.43	13.73
Florida	30.54	18.45	15.73	22.40	9.80	14.12
Georgia	28.58	17.06	16.31	21.55	9.33	12.16
Hawaii	24.28	17.63	17.61	25.28	11.46	12.57
Idaho	27.18	15.73	13.45	21.73	8.98	12.76
Illinois	35.94	18.26	17.87	21.40	10.15	15.90
Indiana	25.20	17.46	13.69	21.61	9.96	12.78
Iowa	27.44	15.80	13.13	20.18	9.56	13.37
Kansas	26.58	14.16	13.31	20.11	9.10	12.42
Kentucky	29.04	15.79	14.19	21.69	9.18	11.43
Louisiana	27.99	14.74	14.73	20.16	7.75	10.91
Maine	28.37	15.82	15.33	22.79	9.69	12.33
Maryland	27.85	18.65	18.63	26.83	10.63	15.41
Massachusetts	40.23	19.17	20.03	24.51	11.46	16.09
Michigan	32.33	20.82	20.67	24.69	10.45	14.70
Minnesota	33.00	17.84	18.06	23.26	10.95	13.58
Mississippi	22.79	13.91	13.54	18.69	8.16	10.80
Missouri	34.82	15.89	15.98	20.19	9.11	13.32
Montana	19.90	14.55	12.62	19.04	8.55	13.01
Nebraska	29.69	16.00	15.11	19.48	9.39	14.60
Nevada	31.45	17.59	18.71	26.58	11.51	14.18
New Hampshire	27.24	16.10	16.92	22.49	10.87	14.00
New Jersey	37.81	20.82	22.27	26.47	11.26	17.68
New Mexico	24.60	14.42	15.46	23.39	9.27	11.90
New York	40.97	22.83	22.44	25.24	10.89	17.39
North Carolina	30.49	15.87	16.37	22.47	9.29	12.93
North Dakota	22.77	14.13	12.28	19.75	8.58	12.73
Ohio	28.25	18.10	16.65	22.70	9.83	14.25
Oklahoma	31.91	14.59	13.82	20.27	8.24	12.26
Oregon	30.61	18.08	16.79	25.64	11.09	14.94
Pennsylvania	29.86	19.68	18.15	22.32	9.99	15.23
Rhode Island	29.60	20.15	17.55	25.13	10.88	15.69
South Carolina	25.29	16.17	15.19	22.48	9.40	11.55
South Dakota	23.95	14.19	11.73	19.62	8.76	12.60
Tennessee	26.10	15.25	16.24	21.50	9.34	12.87
Texas	32.16	16.33	16.07	21.16	8.81	13.81
Utah	33.80	15.28	15.96	21.97	9.59	13.11
Vermont	24.66	16.10	17.41	22.68	10.13	13.31
Virginia	31.01	15.94	18.37	23.31	9.54	14.04
<b>Washington</b>	<b>30.06</b>	<b>17.65</b>	<b>21.75</b>	<b>26.86</b>	<b>11.43</b>	<b>16.94</b>
West Virginia	20.08	16.65	13.54	20.24	7.71	11.23
Wisconsin	29.44	17.31	15.43	22.61	10.12	15.18
Wyoming	19.58	15.43	12.46	19.78	8.74	13.39
U.S. Average	33.14	18.22	18.58	23.07	10.11	14.80
<b>Washington's Ra</b>	<b>20</b>	<b>17</b>	<b>4</b>	<b>3</b>	<b>7</b>	<b>4</b>

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics (www.bls.gov), August 2002

Table 41 (cont.)  
Cost of Doing Business  
Average Wages, 2000  
(Dollars)

	Food Preparation and Serving Related SOC 35-0000	Building and Grounds Cleaning and Maintenance SOC 37-0000	Personal Care and Service SOC 39-0000	Sales and Related SOC 41-0000	Office and Administrative Support SOC 43-0000	Farming, Fishing, and Forestry SOC 45-0000
Alabama	6.68	7.89	8.20	12.09	11.07	10.96
Alaska	9.09	11.33	12.02	12.26	14.29	17.44
Arizona	7.33	8.39	9.04	13.28	11.94	7.68
Arkansas	7.00	7.65	7.26	10.57	10.35	8.68
California	8.19	10.00	11.15	14.92	13.97	7.90
Colorado	8.47	9.56	9.66	14.41	13.20	9.69
Connecticut	9.15	10.97	11.24	16.01	14.46	10.84
Delaware	8.20	9.72	9.29	12.98	12.72	10.93
Florida	7.64	8.55	9.11	13.15	11.56	8.07
Georgia	7.41	8.52	10.63	13.24	12.33	9.17
Hawaii	8.76	10.43	12.96	11.95	13.09	9.80
Idaho	7.03	8.66	8.25	11.30	11.32	11.22
Illinois	7.22	9.91	10.39	13.43	12.89	9.93
Indiana	7.41	9.28	8.92	12.39	11.57	10.57
Iowa	7.18	8.97	8.27	10.96	11.31	10.76
Kansas	7.05	8.55	8.56	12.29	11.52	11.49
Kentucky	7.22	8.49	10.43	11.46	11.26	9.35
Louisiana	6.90	7.54	8.08	11.07	10.63	11.33
Maine	7.84	9.37	8.51	12.03	11.50	11.95
Maryland	7.91	8.95	9.30	13.29	13.13	10.81
Massachusetts	9.15	11.09	11.12	15.15	14.02	10.89
Michigan	7.78	10.42	10.31	13.79	13.13	10.91
Minnesota	7.96	10.11	9.93	14.55	12.98	12.00
Mississippi	6.67	7.60	8.74	10.38	10.52	10.59
Missouri	7.73	8.86	8.96	12.28	11.89	9.89
Montana	6.90	7.87	7.83	10.99	10.28	12.42
Nebraska	7.21	8.65	8.74	11.51	11.05	9.74
Nevada	8.79	9.77	9.73	12.51	12.24	12.27
New Hampshire	8.19	9.97	9.15	13.54	12.28	12.46
New Jersey	9.12	10.72	10.40	16.05	14.14	9.75
New Mexico	7.03	7.82	8.16	10.89	11.10	6.25
New York	8.38	11.81	10.16	16.68	14.22	10.55
North Carolina	7.37	8.61	8.70	12.62	11.96	10.57
North Dakota	7.18	8.18	8.13	10.53	10.58	9.87
Ohio	7.36	9.59	8.99	13.26	12.16	11.27
Oklahoma	6.81	7.78	8.37	10.87	10.86	9.23
Oregon	8.06	9.98	10.42	14.31	12.51	12.21
Pennsylvania	7.51	9.39	9.23	12.29	12.18	10.35
Rhode Island	8.26	10.07	9.44	13.87	12.92	9.62
South Carolina	7.16	8.28	8.85	11.29	11.16	9.91
South Dakota	7.15	8.05	8.33	11.55	10.19	10.03
Tennessee	7.25	8.28	9.63	12.33	11.54	10.25
Texas	6.96	8.01	9.76	12.62	12.22	8.54
Utah	7.53	8.82	9.92	12.59	11.37	7.83
Vermont	8.37	9.43	9.28	12.36	11.79	10.85
Virginia	7.66	8.55	11.79	12.45	12.54	9.95
<b>Washington</b>	<b>8.65</b>	<b>10.64</b>	<b>11.94</b>	<b>15.23</b>	<b>13.61</b>	<b>10.63</b>
West Virginia	6.63	8.08	7.58	9.69	10.30	10.41
Wisconsin	7.76	9.47	9.08	13.01	12.08	11.39
Wyoming	7.17	8.52	8.08	10.24	10.47	10.69
U.S. Average	7.72	9.41	9.86	13.46	12.64	9.07
<b>Washington's Rank</b>	<b>7</b>	<b>6</b>	<b>3</b>	<b>4</b>	<b>7</b>	<b>22</b>

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)), August 2002.

Table 41 (cont.)  
Cost of Doing Business  
**Average Wages, 2000**  
(Dollars)

	Construction and Extraction SOC 47-0000	Installation, Maintenance, and Repair SOC 49-0000	Production SOC 51-0000	Transportation and Material Moving SOC 53-0000
Alabama	12.82	14.42	11.81	11.25
Alaska	22.24	20.89	17.06	17.20
Arizona	14.02	15.55	11.84	11.99
Arkansas	12.54	13.91	10.70	11.25
California	18.60	17.16	12.09	12.15
Colorado	16.18	16.65	12.43	13.01
Connecticut	19.08	17.84	14.28	12.86
Delaware	16.35	16.75	14.72	13.10
Florida	13.19	14.71	11.00	11.09
Georgia	14.13	16.09	11.64	12.44
Hawaii	22.24	18.83	12.88	14.36
Idaho	14.57	15.21	11.67	11.50
Illinois	21.38	17.69	12.30	13.20
Indiana	17.28	16.68	13.49	12.87
Iowa	14.97	14.77	12.67	12.03
Kansas	14.96	15.84	13.35	12.09
Kentucky	14.67	14.88	12.91	12.66
Louisiana	13.31	14.52	13.52	11.47
Maine	14.04	14.83	12.29	11.31
Maryland	16.04	16.72	13.12	11.98
Massachusetts	20.17	18.17	13.72	12.97
Michigan	19.90	18.19	15.86	13.34
Minnesota	19.73	17.47	13.69	12.94
Mississippi	12.47	13.42	10.73	10.58
Missouri	18.25	15.83	12.72	12.47
Montana	14.76	14.44	12.10	11.46
Nebraska	14.16	14.27	11.43	12.26
Nevada	18.22	17.14	12.62	11.76
New Hampshire	15.01	16.26	12.52	11.76
New Jersey	21.04	18.60	13.84	12.88
New Mexico	13.44	14.47	11.55	11.08
New York	21.39	17.47	12.85	13.14
North Carolina	13.22	15.33	11.71	11.51
North Dakota	14.11	14.65	11.57	11.91
Ohio	17.54	16.04	13.81	12.40
Oklahoma	13.02	14.73	12.24	11.78
Oregon	18.53	16.69	13.23	12.41
Pennsylvania	17.34	15.82	12.86	12.61
Rhode Island	17.76	15.72	11.91	11.21
South Carolina	13.13	14.92	12.31	11.11
South Dakota	12.71	14.03	10.61	10.73
Tennessee	13.75	14.82	11.95	12.16
Texas	13.28	15.17	11.89	11.93
Utah	14.77	15.63	11.72	12.93
Vermont	13.86	15.19	12.78	11.54
Virginia	14.33	16.27	12.41	12.48
<b>Washington</b>	<b>20.15</b>	<b>18.15</b>	<b>14.18</b>	<b>13.91</b>
West Virginia	14.63	14.76	12.79	10.75
Wisconsin	18.05	16.24	13.39	12.34
Wyoming	14.75	15.59	14.43	13.60
U.S. Average	16.56	16.23	12.72	12.32
<b>Washington's Rank</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>3</b>

Source: "Occupational Employment Statistics," US Department of Commerce, Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)), August 2002.

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